

irregular discharges, accompanied by greater or less abdominal pain. Perhaps she passes a distinct decidua, although this is rarely seen, or, if seen, recognized. Without the evidence of the decidua, however, the symptoms enumerated are sufficient to lead to the diagnosis of pregnancy, and the chances are in favor of an ectopic gestation. Electricity is used; the woman does not miscarry, but the symptoms she had complained of disappear, the tumor diminishes in size, the uterus resumes its normal dimensions.

Was the diagnosis at fault in this case? There are some who so claim; but, for such, seeing alone is believing. Now, in medicine we are obliged to take much on faith, and especially in instances similar to the one typified; for absolute proof can only be yielded by opening the abdomen and demonstrating the ovum or chorionic villi. Obviously, all cases are not as typical as the one assumed; but, the object being to meet the assertion that electricity cannot destroy the ovum, reference to typical cases most fitly does this, and a cursory examination of the records will reveal a number of such cases.

2. *Electricity, resorted to prior to the third month of gestation, and in the absence of symptoms pointing to rupture, carries with it no immediate risk, and the chances of future danger are insignificant.*—Under the given conditions, there has not been recorded a single instance where the woman has been killed as the immediate result of the application of electricity; and this statement may be weighed against the fact that there are on record instances of death following primary laparotomy for supposed ectopic gestation. Discussion of this point is, in view of the known facts, simply a waste of time.

In regard to the destroyed ovum becoming a source of future risk to the woman—and this is the *one* great argument for those who favor primary laparotomy—the fact is, that it does not. Quite recently, Dr. Brothers, of this city, has patiently investigated the after-history of twenty-five cases of ectopic gestation from two to eight years after the use of electricity, and these women were all alive and enjoying good health. To those of us whose fortune it has been to witness the absorption of considerable masses of pelvic exudation as the result of the persistent use of electricity, this statement is not surprising. Up to the third month of gestation, the ovum is only about the size of a hen's egg; the placenta, as such, has not formed; the embryo is only about one inch in length; ossification is only beginning to appear in the inferior maxilla and in the clavicle. The wonder would be that such a mass should not become disintegrated and absorbed, or, failing this, encapsulated; and one or the other of these alternatives must have occurred in the twenty-five cases sifted by Brothers. Granting, however, for the moment, that the dead ovum may prove a source of future risk to the woman, this does not carry with it the assumption that primary laparotomy is the wisest course to pursue. A certain amount of risk is associated with primary laparotomy, probably more than with secondary laparotomy. In the first instance the parts are more vascular, in the second the adhesions are firmer. The element of shock is in both instances equal. Sepsis may to-day

be practically eliminated. The question in a nutshell reduces itself to this: In face of an at best problematical contingency, are we justified in subjecting a woman to the immediate risk which is associated with every laparotomy, however skillfully performed? Given a case of supposed ectopic gestation in private practice; primary laparotomy is performed, and the woman dies. The husband and friends become cognizant of the asserted fact (and warrantably asserted) that in many similar instances electricity has been resorted to and the women have recovered. Will the operator be held blameless? In hospital and in tenement-house practice, if the result of an operation be unfavorable, the ulterior consequences to the operator, although his responsibility is exactly the same, are far different from what obtain in private practice.

Lastly, an argument which has been advanced in favor of primary laparotomy, is that, *generally, the diagnosis of ectopic gestation is only certified to on opening the abdomen*, and that resort to the knife is indicated for relief of an obscure condition; that is to say, the laparotomy is explorative. Such argumentation is, *prima facie*, very weak. Under the limitations for resort to electricity, as held by the writer, the symptoms are not urgent; there are no signs of impending rupture. Electricity, as has been proved over and over again, can do no harm, and, if the diagnosis be correct, will kill the ovum. An exploratory incision may prove the diagnosis incorrect, and may prove the existence of uterine pregnancy, with resulting miscarriage and death of the mother. Such instances are on record.

From a conservative standpoint, and with due regard to the present and the future well-being of our patients, the time is as yet hardly ripe for primary laparotomy in ectopic gestation, except in those instances where electricity fails, and except there be symptoms of rupture of the sac. When speaking of electricity, the constant current is intended, and not the interrupted galvanic or the faradic currents. If, at any time thereafter, the non-absorbed sac gives evidence of dangerous action, secondary laparotomy may always be resorted to, and with no greater, if with as great, risk as that which may accompany primary laparotomy. After the third month, when ossification has advanced to a considerable degree, primary laparotomy should be the choice, chiefly for the reason that the chances of absorption are lessened by the presence of bone.

The hospital surgeon and the pure and simple gynecologist will probably continue to advocate primary laparotomy, in part from bias and in part from honest conviction. The embryo gynecologist, without previous, prolonged general training, will, likely enough, take the same ground until experience (possibly sad) has taught him that the knife is by no means the sheet-anchor in case of pelvic disease or abnormality. The general practitioners, however, and in particular those who, in course of time, limit their general work in the direction of obstetrics and gynecology, will cling to electricity in the light of our present data, on the ground that it carries with it no immediate risk, and that, in the event of future complication

laparotomy is always possible. The marvellous successes of one or more individuals, through primary laparotomy, should not lure the vast majority of professional men into rejecting what has been tested and been proved good, and into accepting teaching which, if generalized, may be followed by most disastrous consequences to women.

109 EAST FIFTY-FOURTH STREET.

CEREBRAL EMBOLISM—REPORT OF A CASE.¹

By SAMUEL WOLFE, M.D.,

Lecturer on Physiology in the Medico-Chirurgical College, Philadelphia.

I AM led to choose the case I am about to report as the basis of this paper in the hope that the discussion which may follow will tend to clear up some points, on which, though I have strong convictions, and will present them to you, there is still some doubt. The fact that it has been carefully observed, and the symptoms and conditions have been faithfully noted, will also, I trust, influence you to listen with interest to its details.

J. W. G., male, aged seventy-nine; was hurriedly called to him on July 18, about midday. He was lying in bed; pulse 40. Pupils immobile, not dilated. Would not answer questions, but seemed to comprehend that he was spoken to, and also to grasp the idea, as he made futile attempts to protrude the tongue, and moved his eyes and lips feebly in the attempt to answer a question. The left eyelid drooped slightly; the right arm moved with weakness, raising the hand and flexing the forearm; but the arm dropped when raised. The right leg was also very feeble in its movements. He was very restless, making continual attempts to sit up. Drew about one fluid ounce of urine with catheter.

About an hour before my visit, immediately after having left the dinner table to seat himself in a chair, his daughter, attracted by something in his appearance, spoke to him, but received no reply. As she moved toward him, he reeled to the right side and fell.

At my second visit, 9 P. M., on same day, the same quantity (one ounce) urine was drawn. The right arm was entirely motionless, and the right leg nearly so. The conjunctival reflex on right side, and abdominal and plantar reflexes on both sides were absent. The pulse was 40; the temperature 100.2°. A fibrillary twitching of lower half of orbicularis palpebrarum was noticed.

On the second day, at 10 A. M., pulse 40, temperature, 97.6°. The respiration is of a peculiar type, differing from the Cheyne-Stokes, in being more nearly allied to a type which has been described by Biot as sometimes occurring in meningitis. There occur from ten to fifteen regular rhythmical movements, fairly full. Then they rapidly become less full and regular, and are occasionally broken by slight sighing; then a pause is reached, lasting from twenty to thirty seconds, after which the regular full movements immediately succeed. Twelve hours after catheterization the urine had passed involuntarily. The night

had been restless. He makes decided efforts to reply to questions, but can frame no words.

At 10 P. M., same day, pulse 36, and weaker. Urine by catheter, three ounces. Right arm below elbow is slightly used. Respiration is again regular, but purely abdominal.

Third day, 9.30 A. M., pulse 36, temperature normal, respirations nearly normal in type. Swallows more slowly and with great difficulty. Seems to have less comprehension of his surroundings. Urine two ounces. Expelled through catheter with less force than formerly.

At 9 P. M., same day, pulse 36, temperature 99.6°, respirations true Cheyne-Stokes type. Urine passed involuntarily.

Fourth day, temperature normal, right arm raised, touching face with hand.

Fifth day, 9 A. M., temperature 97.2°, pulse 36, respirations Cheyne-Stokes type.

At 9 P. M., same day, has been very restless. Puts both hands above his head. His temper had been very irritable, sometimes almost violent, during the day. This was particularly manifested towards one of the attendants, for whom he seemed to have a special dislike. The power of movement had sufficiently increased to make it somewhat difficult to keep him in bed. He drank milk and water with but little difficulty. The lower right side of the face now showed signs of decided paralysis, while there was well-marked partial ptosis on the left side with over-action of the corresponding corrugator supercilium. The left orbicularis palpebrarum twitched spasmodically. I gave him one-quarter grain morphia sulph. hypodermically and left him for the night. He had passed urine involuntarily three times during the day.

Sixth day, 9 P. M., without moving from the spot on which he had been placed, he had slept twelve hours. There had been no discharge of urine. One ounce was obtained by catheter. Pulse more feeble.

At 3 P. M., same day, temperature 101°, pulse 40, pupils strongly contracted. The right arm was rigid, with occasional clonic contractions. Respiration Cheyne-Stokes type.

Seventh day, 10 A. M., pulse 56, respiration 56, temperature 103.4°. Pulse feeble and stringy. Respirations regular, but not stertorous. Of the condition of the heart I will speak further on, but may here say that for many years there had been a loud murmur. The respirations and heart-beats now coinciding in frequency, furnished to the ear a sound of great intensity, apparently made up of the heart murmur mixed with exaggerated breath sounds.

There is much clonic spasm of the muscles of the right side, the pectorales, notably the minor, being most prominently affected. The urine had dribbled away, and the catheter showed the bladder to be empty. The pupils were dilated to about midsized.

At 9 P. M., same day, pulse 72, respiration 64, temperature 105.6°. Pulse dicrotic.

Death occurred five hours later, without a struggle. The family would not consent to an autopsy.

The history of the case preceding this attack furnishes some data bearing on it, and, on account of a

¹ Paper read before the Montgomery County Medical Society, at the meeting of September 11, 1889.

permanently slow pulse under the most widely different circumstances, I shall endeavor to give a fairly full account of it.

He was a carpenter by occupation. In middle life he had financial reverses, and formed the habit of drinking. He continued drinking heavily till about eight years ago, when he first consulted me, suffering from lately acquired attacks of minor epilepsy. I prescribed a regulated diet and interdicted the use of alcoholics, and I have the best evidence that from that hour, until the time of his death, eight years later, he never took one drop of alcoholic liquor, excepting what my prescriptions furnished. Such implicit obedience, on the part of a confirmed alcoholic, to the merest casual and unemphasized advice, is so unique that I am tempted to a digression. I am constrained to believe that had I endeavored to make this portion of his regimen a peculiarly prominent feature by a long dissertation on the evils which had ensued from the habit, on the disastrous consequences which would be likely to follow its continuance, and on the methods which he should adopt to overcome it, instead of simply saying, in the course of mapping out his dietary, "Don't use any liquor," I say I am inclined to think he would not have obeyed so well.

To return, the attacks of epilepsy recurred at frequent intervals, when at their worst, several times a day. Treatment by bromides and other remedies seemed to produce no effect. At the end of several years they, however, disappeared, apparently spontaneously, during a mild attack of catarrh of the bowels, and never returned.

At the time when I first saw him, his pulse was 40, and though I subsequently saw him occasionally when he had high fever (malarial), I never found his pulse to rise higher until some hours before his death, as I have above indicated. I had very frequent opportunities to take his pulse rate, and at times found it as low as 32.

He was not known to have ever had pneumonia, acute rheumatism or other specific febrile disease. There were no special evidences of syphilis.

The arteries were atheromatous. There was a loud, whistling, systolic murmur, heard with greatest intensity one inch below the nipple. The cardiac impulse was in the fifth interspace, one inch below and one inch to the right of the nipple. The second sound of the heart was very faint. The murmur was not transmitted along the neck, but was well heard in the axilla.

During the last year of life he had suffered considerably from muscular pains and insomnia.

On June 4, about six weeks before the onset of his fatal illness, he had been suddenly seized, while sitting in his chair, reading, with sickness on the stomach. He reeled in his chair toward the right side, recovered himself, and fell on the left side. When picked up he was very tremulous, and had some jerking of the arms. While lying on the lounge, on left side, his eyes turned towards the right side, and he felt as if rolling forward. Before he was brought to the lounge, while still lying on the floor, he had repeatedly cried, "I am falling." There was intense pain in the head, in the anterior fossa, and repeated

vomiting of black matter and food. There had apparently been but a momentary loss of consciousness, if any. Prior to this he had two distinct attacks, somewhat similar, though less severe, in which there had been slight, very temporary impairment of motion, with longer continued impairment of sensation, in both cases affecting chiefly the arms.

From the above attack he recovered, after three days' confinement to bed, during which time he had at first frequently vomited. There was, however, some continuance of headache, which at times was quite severe, and which on the forenoon of his final attack was intense. He had also for several days been more quiet and less sociable than usual, and since the seizure of June 4 his intellect was dull and feeble.

In reviewing this case, with an endeavor to arrive at conclusions regarding the lesions, pathology and diagnosis, we must look for a cause capable of producing a profound primary and temporary effect, with a longer continued and less intense secondary result, either several times renewed or else extended in its operation. The nature of the onset of the final attack and even the further course of it leave room for doubt as to whether there was hemorrhage or vascular obstruction. And this doubt indeed exists in most cases where the latter is found post mortem, although the same cannot be said to be true in equal degree of the former. In other words, it is comparatively easier to be certain that the lesion is hemorrhage than that it is vascular obstruction. To a very great extent the same conditions predispose to both diseases. While the most rational conclusion will probably be reached by a careful analysis of the symptoms and their course, I may anticipate by saying that the continuance of the intellectual torpor without rapidly deepening into coma, accompanied by signs of extensive intracranial lesion, inclines to the theory of obstruction.

The most common seat of vascular obstruction by cerebral embolism is the middle cerebral artery. The basilar may be obstructed in a portion of its course or incompletely occluded, and in the latter case there may be a one-sided obstruction of its median or radicular branches, which have the most prominent share in the nutrition of the pons and also furnish some of the blood supply of the medulla oblongata, and especially of some of its most important nerve nuclei.

In my case the hemiplegia was never complete, and was diversified in intensity in the course of the disease. Thus, on the second day, it was more profound than on the first, but less on the third, fourth and fifth days; thus indicating an attempt at a collateral circulation. The lower part of the right side of the face was paralyzed on the fifth day, at the same time that the ptosis on the left side was most marked, indicating the affection of a new basilar branch. These paralyses, like the former, were less marked, in fact almost quite disappeared later.

All these symptoms, if occurring at all in hemorrhage, would have been complete from the onset, or, if gradual, would have increased to a maximum intensity, and continued without abatement.

The bladder symptoms indicated interference, with-

out complete obstruction of the path from the cerebral controlling center.

The initial fall of temperature, as well as the high rise at the close (which probably reached 107° or more) is indicative of basilar obstruction.

The respiratory phenomena, with their varying types, the changes in the power of deglutition, and the impairment of speech, which seemed to be motor rather than psychical, all argue in the same direction.

The pulse, rising to 72 from a usual rate of 40, and which had always resisted all the ordinary forces which in other individuals accelerate it, may be looked on as profoundly affected in the manner in which obstruction of the basilar artery or its branches produces. The permanence of the slow pulse rate during many years is evidence of a chronic lesion acting on the cardio-inhibitory center, and, as such, might be viewed as evidence of a predisposition to disease of the medulla.

To sum up and conclude, I believe the case accounted for in regarding the first three attacks from which recovery took place as successive attacks of embolism of individual median branches of the basilar, the collateral circulation bringing about the recoveries and the final attack, as a series of emboli affecting successively mainly the radicular branches, in which the variation of the symptoms is explained also by the partial establishment of a collateral circulation.

I cordially invite you to a full discussion of the case, hoping that, if in error, I may thereby reach a true conclusion, or, if correct, to be sustained by your highly-valued judgment.

SKIPPACK, PA.

ON THE USE OF HOT BATHS AND HOT SPRINGS IN THE TREATMENT OF SYPHILIS.

BY SIGMUND LUSTGARTEN, M.D.,
NEW YORK.

I MUST confess that, as yet, I have no personal knowledge of American watering places. I have, however, some experience in European thermæ, and will, therefore, discuss the subject, because I am fully convinced that there are no springs in existence which can have any specific therapeutic effect on syphilitic diseases. I do not mean to imply that the Hot Springs have no value whatsoever in the treatment of syphilis, but I wish to state that their efficacy is not a specific one, and that their therapeutic effects are general and in accordance with the laws of physiology and pathology. Scientific and clinical observations have now shown us that we can no longer attribute different qualitative action to the various mineral preparations used in the treatment of syphilis. We have, also, in the same manner, discarded the belief in the mysterious healing power of springs emanating from the depths of the earth, nor do we to-day believe that natural heat is more efficacious than artificial heat.

We have also given up the *naïve* stories of former days that were attributed to the effects of sulphur baths upon mercury stored up in the body; and in judging of the therapeutic action of hot springs, we endeavor to-day to rely only on empiric facts and scientific investigations.

The chief therapeutic benefit derived from the use of springs is the *hot bath* itself. Every experienced practitioner knows what an important rôle the latter plays in the treatment of syphilis, although vapor baths are not used as much any more as they were at the time of the *Rust* school and of still older schools. The hot bath produces a double effect—a general and a local one. In regard to their general action, investigations have shown that excretion of urea is increased. The quantity of urea that is daily eliminated is always in proportion to the quantity of nitrogenous matter formed. The increase of urea, therefore, teaches us that the warm bath furthers the process of decomposition, and the elimination of chemical products, among which are included the poisonous leukomaines. Douches, vapor baths, methods of producing transpiration, and massage, increase the above-mentioned action. If these facts hold for the healthy organism, then we can, by analogy, assume that the specific products of the virus, the ptomaines, to the retention of which many a cachexia is surely due, will also be eliminated, and probably still more quickly in a body affected by an infectious disease. Mineral poisons, such as mercury, lead, arsenic, are also more quickly eliminated.

Queirola furnished us lately with an interesting contribution to this question. He showed that the sweat of individuals who were suffering from fever in connection with some acute infectious disease, contained very toxic substances, which were not found in the transpiration of normal persons. If these observations are correct, the skin plays a great rôle in the elimination of these *toxines*.

The local effects of baths are as follows: In the first place, acceleration of the elimination by removing epidermis mechanically; secondly, by their action upon the bloodvessels of the skin, they stimulate the circulation; thirdly, they also act as a great stimulus upon the nervous system. By producing a more active circulation in the skin they likewise facilitate the absorption of mercury.

Judged, from this point, hot baths ought to take a prominent part in the treatment of syphilis. I myself prescribe regularly hot baths, or even vapor baths and massage, during the intervals of an intermittent treatment, according to the method of *Fournier*, which method of treatment I generally only employ for the space of two years. I am very well satisfied with the result. It is impossible for any one to deny the beneficial influence produced upon body and mind, and also upon the course of the disease itself. As syphilis in its early stage produces frequently anæmia and cachexia, I substitute only in those cases in which the organic functions seem sufficiently strong, a hydropathic treatment for the hot baths, as the former produces the same physiological effect—namely, stimulation of the eliminative power of the body. Generally I confine myself to the

¹ Read in the discussion of Dr. R. W. Taylor's paper on Hot Springs, Arkansas, and the Treatment of Syphilis, before the New York Post-Graduate School Clinical Society, January 11, 1890.

use of the hydropathic treatment for a four-weekly course at the end of the first, and at the end of the second year.

Hot baths are of just as great importance in the latter stage of acquired and hereditary syphilis as in the early period, although salt water baths, the use of which will be mentioned hereafter, are perhaps more frequently employed in such cases.

The indifferent thermæ have the same effect as the hot baths, and are therefore employed under similar indications. It is only in those cases where iodine and mercury are not tolerated by the system; furthermore, in cases of resulting mercurial cachexia, which are accompanied at the same time by florid symptoms of Lues, that the hot springs form the chief factor in the treatment of syphilis, the therapeutic effect of the former being sustained by the use of tonics. Among the indifferent thermæ we must also include the Hot Springs of Arkansas, as they only contain 8.5 grains of solid substances to the gallon. In Europe the indifferent springs, so-called, "Wildbäder," in spite of their beautiful natural location, are not employed as much in the treatment of syphilis as the sulphur and salt-containing springs.

In determining the relative efficacy of the thermal springs, we must further take into consideration their *chemical composition*. In the first place, regarding the sulphur springs containing sulphuretted hydrogen, and the alkaline sulphides, they have for a long time been held in high repute in the treatment of syphilitic lesions and mercurial cachexia. Formerly extraordinary qualities were ascribed to sulphur, as, for instance, changing a latent syphilis to a florid one (*sulfur est proditor syphilidis*). It was also supposed to neutralize the mercury that had accumulated in the system. We now believe that sulphur baths do not differ in their action from those of the indifferent hot springs. The small quantity of sulphuretted hydrogen absorbed by the skin and the respiratory organs, can have no influence upon the process of assimilation, nor can the irritating effect of this chemical be very great. A five per cent. solution of sulphide of potassium, rubbed into the skin, does not irritate it, consequently 1:150 per cent. of sulphide of sodium contained in the thermæ cannot certainly be considered to have an irritating effect, nor do we believe in its therapeutic action as an absorbent remedial agent affecting the blood. The celebrated *Aix-la-Chapelle* is, by the way, not a pure sulphur, but a sulphur-salt spring, and the good results which are obtained there are chiefly due to a rational and energetic specific treatment, in which intinctions take a very important part. The therapeutic effect of other celebrated springs, like those on the Pyrenees, depends probably upon their elevated climatic situation.

Now, regarding saline springs, for example, the chloride of sodium and iodine-brine baths, these increase, as examinations have shown, the process of oxidation to a great extent, and seem to be more efficacious than indifferent warm baths. It is questionable whether a specific effect can be ascribed to iodine baths, although practical experience favors this view.

Salt baths have a pronounced influence on the absorbent action of the skin. The late Professor Sig-

mund of Vienna used to order a hot chloride of sodium bath, to be taken directly before the inoculation, in all cases where the skin did not seem to absorb mercury readily.

Mostly all these things are also used as "*Trink-curen*." By the internal use of water also, the elimination of normal and abnormal products can be accelerated. As the iodine springs contain so very little iodine (0.5 to 10,000 in maximo), this chemical must be added in the form of salts if one wishes to obtain a specific iodine effect. On the whole, we can say, that the physiological effect of salt thermæ is somewhat more energetic than that of indifferent springs.

A third, as yet not very well understood, factor, is the *electrical action*, as some of the springs seem to contain electricity. This fact would account for the therapeutic effect before mentioned—the action of the springs on the nervous system. I am myself very skeptical about this matter, and will therefore refrain from discussing this point until this subject will have been more thoroughly investigated.

Finally, watering places are very beneficial, on account of their *climatic situation*, and also on account of the distraction and the pleasant social life which they offer. We must not underrate this factor in dealing with a sickness like syphilis, where so easily a hypochondriac neurasthenia may be developed, presenting the well-known clinical features of syphilis and mercurio-phobia. This last consideration also explains why natural springs will always be sought in certain cases of syphilis.

The cases in which we might avail ourselves of the natural thermæ in the treatment of syphilis are:

In the first place, in all cases where a change of air is indicated, as in catarrhal affections of the respiratory system, anæmia, or syphilitic cachexia.

Secondly, in cases of nervous prostration, due to or following syphilitic affections. In both cases the indifferent thermæ are indicated.

Thirdly, in those fortunately rare cases in which, in spite of all rational treatment, relapses occur in quick succession; also, in the still rarer cases of malignant syphilis where there is absolute intolerance for specific treatment—in cases also of obstinate affections of glands and bones, and finally in syphilis of the nervous system, and in mercurial cachexia. The sulphur and salt springs are especially adapted in these cases.

696 MADISON AVENUE, NEW YORK.

HÆMOGLOBIN COMPOUND.—Dr. F. E. Stewart, in the *Medical Age*, relates several interesting cases in which the administration of fresh bullock's blood was of the utmost value. Some of these patients had been considered hopeless by competent men, and he is therefore inclined to class this substance very highly as a remedy where a powerful and easily assimilated tonic is needed.

On account of the difficulty in procuring fresh blood at all times, he found, after considerable experimentation, that a mixture of fresh blood, extract of malt, glycerine and spirits furnishes a compound that will keep indefinitely, and this compound is now made by one of our reliable drug firms.

Society Notes.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

Stated Meeting, January 22, 1890.

The President, W. W. KEEN, M.D., in the Chair.

DEMONSTRATION OF THE EFFECT OF THE ENTRANCE OF AIR INTO THE VEINS.

DR. H. A. HARE read a paper with the above title.

Some months ago, I published an account of experiments on seventy dogs, in which I found that the entrance of air into the veins of living animals was not so lethal as is generally believed. It has been taught that minute globules of air entering the veins will produce fatal results, or, at least, most serious symptoms. The way in which I discovered the fallacy of this was by making injections of solutions of drugs. I found that when a small quantity of air was introduced accidentally, no evil effects resulted. On looking up the literature of the subject, I found that the mass of evidence was really against the common belief. There are quite a number of cases on record where patients have died suddenly during operations, and death was attributed to the entrance of air.

In order to be brief, I shall read an abstract from my paper:

"One of the most thorough studies of the subject so far published is, undoubtedly, that of Wattmann, from whom most of the following information is derived, unless otherwise stated. The first experiments of this kind are attributed to Wepfer, who is said to have killed an ox of stupendous size by blowing air with his mouth into its jugular vein; while Redi, in a letter to Steno, written over two hundred years ago, stated that he had killed, in a similar manner, two dogs, a horse, a sheep, and two foxes. Similar studies have also been made by Heyde and Brunner. Ruysch, Valsalva, Morgagni, and others have, at autopsies, recorded the appearance of quantities of gaseous fluid in the vascular system, which they believed to be air. Very much later, Bichat made startling announcements as to the small amount of air required to cause death, when so introduced; but Nysten, a few years later, showed the fallacies in Bichat's assertions.

"In 1818, a patient of Beauchene, at the Hôpital Saint Antoine, while he was extirpating a tumor of the right shoulder and lateral and lower part of the neck, died very suddenly, under circumstances which made him believe that this was occasioned by entrance of air into the vascular system through an opening in a vein." Further cases have since been reported by writers in this country and abroad, by Amussat, Mott, and others.

"The paper of Amussat is one of the most exhaustive of its kind; but its conclusions were vehemently attacked by men no less noted than Velpeau, Gerdy, Bladin, and Malle, all of whom asserted that the symptoms detailed were not to be thought due to the entrance of air, but to other extraneous causes.

"In the experiments of nearly all the early investigators, the air was introduced by blowing with the mouth or a syringe; but Amussat carried out a series of studies in which he opened the jugular vein, and allowed any air to enter that could do so.

"The experiments of Nysten proved that only large amounts of air produce fatal results, the quantity varying from forty to one hundred and twenty cubic centimeters, according to the size of the dog; and he also found that larger amounts must be used to kill the ox or horse.

"Magendie states that he has thrown, with all the force and celerity of which he was capable, forty or fifty pints of air into the veins of a very old horse without his dying immediately; and Cormack blew the contents of his chest, twice filled, into the jugular vein of a horse, before the animal exhibited any signs of uneasiness. Barthelemy has also found that in six horses, weakened greatly by the withdrawal of blood, as much as from four to six liters of air must be introduced intravenously to cause death, and estimates, in consequence, that a man weighing one hundred and thirty-six pounds would be killed only by two-thirds of a liter. Even the experiments of Amussat force him to the conclusion that a considerable quantity of air must be used to cause death. Ore finds eighty cubic centimeters necessary to cause death in the dog.

"The conclusions to be reached, therefore, from all experimental researches, is, that enormous amounts of air must enter a vein to cause death, and that no such quantity can possibly find its way into a vein which has been infused with the knife of the surgeon.

These are facts against the prevailing idea; let us see what the facts are for it. The answer is that there are none. While we have a large number of cases reported of sudden death under operations where veins were opened, in the majority of them the cause of death has been guessed at and not proved. The only case which approaches in any way toward authenticity is that of Mott, who saw a serious, but not fatal, result induced by the entrance of air into the facial vein, and even this is not a proved case. The case of Barlow is equally doubtful as to the real cause of death.

"There are a number of cases on record where death has resulted, according to the physician in charge, from the entrance of air into the uterine sinuses.

"Supposing that ordinary atmospheric air is really capable of acting in the manner generally thought, the question arises as to the method of its influence. Erichsen believes it to be due to the frothy state of the blood, which prevents the due transfer of the circulating fluids through the pulmonary tissue, and Bell believed death to be due to the transference of air to the base of the brain.

"Cormack has thought death to be due to gaseous distention of the heart, and Moore thought it to be due to the entrance of air into the cardiac cavities. Other observers have found air in the right heart, and concluded that in this way the blood is prevented from eventually getting to the lungs and general system. Again, it has been thought that the air pre-

vents the closure of the valves of the heart, or that the bubbles of air entering the smaller capillaries acted as emboli.

"Taking up the last theory first, we find, in the first place, there is no evidence whatever to prove that air may not be driven anywhere that blood can flow, and it is, to say the least, curious that anyone should suppose that a bubble of air, which is compressible in itself, and capable of assuming any form under pressure, should form an impassable barrier against which a blood-pressure of two hundred millimeters could press in vain—a pressure made up of blood, a virtually incompressible body. This seems to be sufficient evidence of the falsity of any such theory.

"Again, why should the air in the cavities of the heart prevent the valves from closing? We are accustomed to test the tightness of rubber bags by inflating them with air or water, and if the valves can close on a current of blood, why can they not do so on a current of blood and air mixed? If the air was as heavy as mercury, and as difficult of propulsion, such a theory might stand.

"Even the theories of the causes of the supposed deaths in man do not, therefore, stand before a rigid examination, which is hardly to be wondered at when we have proved that the quantity of air entering the veins under such circumstances cannot be of any great quantity.

"According to Ashhurst and Agnew, the veins of the neck are the ones most liable to be entered by air, and it is said by Agnew that the frequency of this accident is due to the fact that the venous trunks in that region are, in many places, attached to the deep fascia, which prevents collapse of their walls when wounded; for this reason this part of the body is spoken of as the 'dangerous region,' according to Ashhurst.

"The explanation of the method by which the air finds entrance to the veins is supposed to be a process of suction, produced by the expansile movements of the chest in inspiration. Practically, most surgeons will agree with me in stating that generally the blood-pressure in the jugular vein is sufficient to cause so great a hemorrhage as to prevent air entering the vein; and I have proved the fallacy of the suction theory any number of times by leaving an open canula in the jugular vein, the vessel being tied above to prevent hemorrhage."

Two dogs were then taken, and into the external jugular vein of one was injected twenty cubic centimeters of air, and into the jugular vein of the other, forty cubic centimeters. The animals were subsequently released, and showed no apparent bad effects.

Discussion.—THE PRESIDENT: The Chairman of the Board of Directors wrote to a number of prominent surgeons, asking them to take part in this discussion, but I think, without exception, they replied that they had had no experience with this accident. It has never happened to me to wound a large vein, and have any symptoms which would lead me to think that air had entered a vein. There are, however, a number of statements as to this matter which we must take as the statements of careful observers

and operators. We must also bear in mind the important paper of Senn, of Milwaukee, presented at the meeting of the American Surgical Association, in 1885. His conclusions are somewhat at variance with the experiments of Dr. Hare.

I have always supposed, and taught in my surgical lectures, that the entrance of air into veins was a danger, and have explained it in this way: The air, entering the vein, and passing to the small vessels of the lungs, is churned into a froth, the little bubbles thus formed constitute aerial emboli, which have a considerable amount of adhesion to the bloodvessel walls. We can understand this by an ordinary observation on a summer's day. If we have a glass of cool water, we know that small bubbles of air accumulate at the sides of the glass in consequence of the heat, and these are often dislodged with some difficulty. I can, therefore, easily conceive how, in a bloodvessel of very small caliber, the bubble of air would form an aerial embolus which, adhering by its entire periphery, would not be displaced even by the two hundred millimeters of blood-pressure. Several surgeons have had cases in which, as a fact, sudden death has occurred with a lapping or gurgling sound, apparently from the entrance of air, the patient rapidly becoming asphyxiated, and at the post-mortem there has been found frothy blood in the heart, and pulmonary capillaries. It is hard to maintain that the entrance of air is not dangerous in the face of such observed facts. On the other hand, one is staggered when he sees twenty and forty cubic centimeters of air injected directly into the veins of a small dog, and he cannot conceive how this will have a different effect in different animals, except in so far as the blood-pressure is different.

DR. A. J. DOWNES: From a few experiments on animals, for a different purpose, however, I have thought that there may be an apparent fallacy in these experiments. The danger from the entrance of air is an immediate one. When a vein is wounded, the on-flow of the blood-current, which is considerable in the jugulars, naturally carries air into the veins under different conditions than exist in the experiment. Here, owing to technical manipulations, the venous flow is at least passive. Then, too, nerve-influence may be a potent factor. The suddenness of its entrance, not the quantity of air, may have some effect upon the heart ganglia.

BERKS COUNTY MEDICAL SOCIETY AT THE READING HOSPITAL.

A SPECIAL meeting of the Medical Society of County of Berks was held February 3, in order to accept an invitation of the Board of Managers, to visit their hospital.

DR. CLEAVER, President of the Society, in the Chair. After the nomination of several names for membership, Drs. Shultze, Bachman and Relser were appointed a committee on holding the annual banquet. At 3½ adjourned to Reading Hospital.

Dr. A. S. Raudenbush, medical attendant on duty, and Dr. S. L. Kurtz, surgeon, took the society in charge. In the medical department, we were shown

the following cases: one, very interesting, of aneurism of the arch of the aorta; several of pneumonia; two of typhoid fever; one of arsenical poisoning and a number of others.

Dr. Kurtz: one case of double amputation of legs; one of slough of the soft tissues of thigh following an injury—necrosis of femur; one of recurrent scirrhus of the breast, now interfering with deglutition; one of pelvic cellulitis, suppurating through the vagina. Ununited fracture of radius and ulna, united with silver wire.

After visiting the operating room, the society was invited into the dining-room, where an elaborate lunch was served.

After returning thanks, the society adjourned.

F. W. FRANKHAUSER, M.D.

230 S. SIXTH ST.

The Polyclinic.

MEDICO-CHIRURGICAL COLLEGE.

PROF. WILLIAM S. STEWART, of the Medico-Chirurgical College, recently made a successful laparotomy for an extra-uterine gestation, which burst, and became encysted in the left broad ligament; the foetus, which appeared to have advanced to the fourth month when removed, gave evidence, by its mummified condition, of having been dead for an indefinite time. Although the entire mass was adherent to the pelvic wall, the results of the operation effected a relief from pain, exhaustion, hemorrhage, and general distress, exceedingly gratifying to patient and friends, as she had been suffering for eleven months previous to the removal of the tumor.

CLIMATIC CAUSATION OF CONSUMPTION. — Dr. Henry B. Baker contributes a careful paper (*Jour. of Amer. Med. Assoc.*, Jan., 1890) on this interesting topic. He sums up the elements of the causation somewhat as follows:

1. The bacillus tuberculosis.
2. Introduced into a susceptible organism.
3. Presence of these bacilli in houses, and especially in public places.
4. Invasion of subject, mainly through the air-passages.
5. Statistics of sickness seem to prove that consumptive processes go on most actively after times of low atmospheric temperature, and least actively after times of high atmospheric temperature; and,
6. Prove that in the long run consumption is preceded in time and place (and inferentially in the same individual) by other affections of the lungs; and also,
7. Prove that these affections are common or rare, according as the temperature rises or falls.
8. The accumulation of non-volatile salts (chlorides) in the sputa and solidified lung in pneumonia, coupled with the fact of the disappearance of the chlorides from the urine during the onward progress of pneumonia, collated with statistics of sickness, of deaths, and of meteorological conditions, and with certain facts in physiology, pathology, and chemis-

try, seems to prove that the control which atmospheric temperature has of pneumonia (and, if of pneumonia, also its control of all those irritative and exudative diseases of the lungs and air-passages which it does control), is not direct, but indirect through its well-known control of the atmospheric humidity, and so of the quantity of water exhaled from the lungs and air-passages, influencing the quantity of non-volatile salts which may there accumulate.

9. Residence in low, wet localities tends toward the causation of consumption, and toward the fatality of the disease, because in all such localities the atmosphere is cold, and, consequently, its absolute humidity is small. Other concomitant conditions may contribute—greater atmospheric pressure, greater daily range of pressure, greater daily range of temperature, more active oxidation, less tendency toward deoxidation than occurs under free exposure to sunlight, lack of sufficient nourishing food, etc.

10. Among causes known, or believed, to be *pre-disposing* to consumption, are: heredity; temperament (certain types of auburn-haired persons being supposed to be especially liable to consumption); narrow lymph-spaces in the connective tissue, possibly because of their more readily clogging up by saline, albuminous, or fibrinous exudations; and excess of such non-volatile salts as sodium chloride in the food or drink.

From these generalizations he proceeds to draw conclusions with regard to the prevention of this wide-spread and fatal disease, insisting especially on the disinfection of the sputa and feces of consumption, the avoidance of inhaling cold, dry air, and the choosing of a residence in a region endowed with the most favorable atmospheric conditions.

DIAGNOSIS OF PROGRESSIVE PARALYSIS IN ITS PRODROMAL STAGE.—This stage may anticipate the later and more pronounced stage by ten years, and may affect the mind as well as the body. In this early stage, rheumatoid pains, neuralgias and hemi-crania are frequent: and the latter, especially in an elderly person, is always suspicious. These pains may disappear after a time, to be followed by eye symptoms, generally unilateral. Among the motor phenomena, the following are of consequence: various epileptic and epileptoid attacks, vomiting, transitory paralyses, aphasia, or some difficulty in speaking, and various eye symptoms. The knee tendon reflex may be increased, or diminished, according as the lateral or posterior columns are implicated; and it may differ on the same subject. Later there is impotence, incontinence of urine, sleeplessness and gastric troubles.

Among the mental symptoms to be noted are occasional transitory attacks of excitement due to trivial causes, a tendency to brutality and sensuality, or attacks of great depression.

Whenever there is the least suspicion of progressive paralysis, a complete withdrawal from business should be ordered, and all long journeys, irritating pursuits and forced cold water cures should be avoided.

Deutsche Med. Zeit.

The Times and Register

A Weekly Journal of Medicine and Surgery.

New York and Philadelphia, Feb. 22, 1890.

WILLIAM F. WAUGH, A.M., M.D., Managing Editor.

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THE CO-EDUCATION OF THE SEXES.

IN a recent number of this periodical, we gave expression to our views upon a subject which has of late been agitating the medical profession, and, indeed, scientific people generally, namely, the higher education of women. In this issue we propose, in the same manner, to lay down our convictions upon that other equally important and equally interesting question, the co-education of the sexes.

Positivism in medicine is, as in other sciences and professions, always acceptable as expressing the views, whether affirmative or negative, of the writer or speaker, and thus indicating where the weight of his influence and argument may be found to bear. It has always been our custom, therefore, when asked to advance an opinion upon any matter, to clearly and concisely state our belief—in other words, to take our position—and then to give our reasons for making such a stand. At the outset, then, we would say, that most emphatically are we opposed to the adoption of any plan for the co-education of the sexes. In thus expressing ourselves, we are aware that we are opening the flood-gates of controversy, and venturing upon a field, hotly contested, and where able men, highly versed in the science of polemics, are hurling forth their arguments and denunciations upon their equally able antagonists. Our conviction, however, is strong, and of not a recent date merely. For months—in fact, years—have we, at various times, brought the subject before us, and considered it carefully, weighing the *pros* and *cons*, and we are "of the same opinion still."

It would consume too much space to express, in full, all of the reasons which have induced us to form the opinion and take the stand which we have made, nor do we think that it would be at all necessary to do so. But two or three will suffice to show the grounds upon which we have based our argument, and these we shall proceed to state.

In the first place, then, looking at the matter from a purely ethical point of view, we firmly believe that were a general co-educational system adopted, and

instituted as a feature in the domestic life of our people, while, as many of the advocates of such a procedure claim, there would undoubtedly be an uplifting and elevating of the masculine portion of the recipients of such an educational system, there would be, on the other hand, a corresponding, nay, a greater, depreciation and loss of that pure and sweet womanliness and modest demeanor which is the one redeeming feature which places woman upon a higher level of refinement and culture than that of her noble lord. The resultant good would be over-balanced by the resultant evil; the gain would not be worthy of the expenditure. It is in this higher plane of moral and religious culture of the women of our land that we, as a nation, pride so greatly. Whatever would tend to undermine and destroy this bulwark upon which we rest so much of the glory of our people should be most emphatically opposed, and such do we regard any co-educational system.

But what is of still more interest to us, as scientists and physicists, are the purely scientific arguments which can be brought to bear upon the matter as proving the undesirableness of such a plan of education. Of these we have selected two, as bearing, the one upon the individual woman herself, and the other upon the sex in general, and, through it, upon the human race.

As regards the woman herself, then, she is so constituted, physically, that at certain regular periods she is incapacitated, both bodily and mentally, from any undue amount of strain—physical or mental. This necessarily occasions a loss of time—a valuable factor in the higher college life. Now, if she be thrown into competition—not with others of her own species, who are thus upon an equality with her, and must undergo the same amount of lassitude and indisposition—but with a sturdier, stronger species, with no such periods of physical disability, and with an equal mental capacity to her own, is it not evident to all that, in order to secure the same mental acquisition, she must, in her periods of activity, undergo a greater mental and physical strain, with all of the attendant risks? The disastrous results of such a course have only too often been sadly exemplified. Again and again have valuable lives been wasted through a prolonged invalidism which had its foundation in an unwise, unphysiological competition in some school or college with strong male competitors.

But this is not all. Supposing that the ambitious female student has passed, successfully through such a college course without any deleterious effects upon her health, further investigation must be instituted, as to the effects such a training has had upon her fecundity. Will she be as apt to do her share towards the propagation of the race as her less highly endowed sister? This is a question which is not positively answered, as yet; but many eminent specialists assert, and that emphatically, that many cases of sterility are to be found in those who have undergone such a course of excessive mental strain.

at times when such a strain should have been avoided. Here, then, is a menace to the race, and as those whose duty it is to advance, to the best of their abilities, the welfare and health of the race, we, as physicians, should strenuously oppose anything which tends towards the demoralization and physical degeneration of mankind.

These, then, are but a few of the main arguments which have urged us to the conclusions which we have reached. There are others which will be suggested to those who care to look into the matter. We have expressed ourselves merely because we regard it as our duty to do so, and that we might have a share in opposing any measure which might result in an unfortunate way.—W. A. N. D.

AMERICAN DEGREES IN GERMANY.

LATE reports state that the University of Berlin refuses to recognize degrees conferred by American medical colleges, although those of all other countries are accepted. If we divest ourselves of all native feeling, and look at the matter impartially, it is not difficult to find good reason for this action. The utter neglect of our general and State governments has left the teaching of medicine to the private individuals who secure charters from various authorities. Whenever any official status pertains to a college, the European schools have shown themselves ready to accord due recognition; as in the case of the University of Michigan, which long enjoyed a distinction abroad not accorded to schools ranking very much higher in public estimation at home. Whenever the general or State government will assume the duty of issuing the license to practice, the American physicians abroad will be put upon the same standing as those of other countries.

Another reason for the low valuation of American diplomas is the impolitic publication of greatly exaggerated statements concerning fraudulent diploma-venders. Since the day when Buchanan flourished there has been a great change in this matter; and we do not believe that there is now a place in the United States where a diploma can be purchased outright, conferring the degree of doctor of medicine. When an attempt was recently made to open such a trade in New England, it was at once detected, and the enterprise squelched. The affair attracted but little attention here, on account of its small importance, in view of the promptness with which it was stopped; but one of our English contemporaries made it the theme of the longest editorial we can recollect its giving to any American matter during the year.

To these may be added a third reason, for which the medical journals are responsible: the circulation of anecdotes illustrating the phenomenal ignorance of persons said to be American physicians. Let a note be published calling attention to some valuable observation in the domain of practical therapy, and one or two exchanges may copy it, if it fills up a vacant corner. But let some outrageous item be concocted

by the printer for the same purpose, purporting to tell of a physician whose patient's "wind-pipe ulcerates off, and lets his lungs fall down in his stummick," and every medical editor, from the cultured Boston *Medical and Surgical Journal* down, will diligently assist in giving voice to the slander on the American profession. Small blame to our foreign colleagues if they give credence to the stories so generally circulated by ourselves. If we desire to be received on a better footing abroad, we might endeavor to deserve it by establishing for ourselves such a professional standard as will win the desired recognition. And no small step in the right direction will be taken when we exclude from our journals all items derogatory to our weaker brethren. Nearly all these tales are sheer fabrications, and, as to the few which have some element of truth, is it not better to cover up our brethren's nakedness with the mantle of charity rather than hasten to proclaim to the world their shame, which must perforce be shared by ourselves?

Annotations.

THE WATER QUESTION.

THERE has been a pretty free discussion of the project to purchase the rights of the Schuylkill Canal Company, for the benefit of the city, in relation to its water supply. We cannot see that any new facts were elicited in the discussion. Dr. Shakespeare attacked the Schuylkill water on the score of its causing typhoid fever, and gave a striking illustration of the money cost of this disease, amounting to over twenty-nine millions of dollars in the years 1861 to 1881, in Philadelphia alone. He attributed this loss almost entirely to bad water, without, however, advancing any proof that this is the case. Mr. McKean called attention to the fact that the fluctuations in the prevalence of typhoid were not coincident with any known alteration in the Schuylkill water, or with the prevalence of typhoid in the towns upon that river. A theory which does not account for the actual facts cannot be considered satisfactory. The other suggestions made by Dr. Shakespeare were that the present water supply should be improved by closing wells, by providing subsiding reservoirs and filtration apparatus. The bill now under discussion does not offer any prospect of improvement in the quality of the water.

STRAUS AND WURTZ have ascertained that digestion in the gastric juice at 100° F. destroys the bacilli of anthrax in half an hour, of typhoid and cholera in three hours, and of tubercle in twelve hours. Even when the latter was digested from eight to twelve hours, it was still capable of producing a local tubercular abscess, but not general infection. Hydrochloric acid alone proved equally efficient when added to water in the same proportion as found in the gastric juice, the pepsin adding nothing to the effect. As in ordinary conditions the bacilli are protected by the food in which they exist, it is evident that this germicidal action is not to be trusted.

SUING A DRUGGIST FOR LIBEL.

DR. S. J. LIGGETT, of Philadelphia, has entered suit against a city druggist, claiming \$20,000 damages. It seems that the druggist refused to dispense a prescription, and informed the patient that it would poison her. The prescription was:

R.—Potass. bromid..... 3 ij.
Tinct. aconit. rad..... gtt. xij.
Sp. æther nitros..... 3 ij.
Morphin. sulphat..... gr. iss.
Aq. menth..... 3 ss.
Syrupi..... q. s., ad, 3 iij.

M.—S., two drachms in water every two hours.

The clerk refused to compound the prescription, and is said to have written a note to the patient, stating that an insoluble hydrobromate would be formed which would poison the patient. The latter thereupon dismissed Dr. Liggett at once.

In no manner can the druggist's action be justified. Even if the prescription had called for drugs in poisonous doses, the apothecary would not thereby be justified in making such statements to the patient. Emergencies arise in the practice of medicine which call for heroic dosage; and if, in such cases, the physician is to have his authority defied, and his skill impugned, the chance will probably be lost. Take, for instance, the occurrence of post-partum hemorrhage, where the administration of laudanum in teaspoonful doses has repeatedly proved effectual, after other means had failed. An unwise druggist could easily generate such a degree of hesitancy as would insure the patient's death. Sometimes physicians make mistakes in writing their prescriptions, especially by substituting the corrosive for the mild chloride of mercury and bitter oil of almonds for the sweet. In these cases, the tendency to alliteration often leads to such mistakes. Whenever the prescription appears to be doubtful, or an obvious mistake has been made, the druggist's duty is to refer the prescription to the writer; and so generally is this done that we rarely hear of a city druggist pursuing any other course, unless prompted by personal dislike against the physician. But when personal dislike takes the form of open charges like that made against Dr. Liggett, it becomes libelous, and the physician is fully justified in demanding legal redress. In this case there is not even the excuse, which might be pleaded, of the truth of the assertion. Whatever reaction might take place, there was but one-eighth grain of morphine in each dose; and the prescription was a perfectly safe one.

CHLOROFORM VS. ETHER.

THE report of the Hyderabad Commission will bring assurance to those who have so strenuously upheld chloroform in the face of an almost universal belief in its dangerous properties, and comfort to the many who have been deterred from using it by the same considerations, though desirous of availing themselves of its superiority in case of administration. The investigations have been conducted without regard to expense by gentlemen fully qualified for the work. We may be satisfied that the results obtained

are not marred by the individual bias of the reporters, when we find among them one who has been so prominent an advocate of ether as Dr. Brunton. The Commission declares that chloroform will never cause death, if administered with certain precautions, and that as long as the respiration goes on without impediment the patient is safe. When death results from syncope at the beginning of chloroform inhalation, the cause is to be ascribed to mental emotion rather than to any action of the anæsthetic. Herein lies the danger of chloroform to persons with fatty or dilated hearts; a danger which relates to emotion, however produced. It may be that this is somewhat lessened by the stimulating effects of ether inhalation, at its commencement, and, if so, this will still constitute an indication for preferring this drug in all cases of cardiac asthenia.

MEDICAL COLLEGE CONFERENCE.

THE medical colleges of Baltimore have initiated a movement in favor of reviving the Association of American Medical Colleges. This, as our older readers will recollect, was one of the early efforts made to advance the standard of medical education. The times were not favorable to it, and the opposition of some of the great eastern colleges practically killed it. Now, however, such a change has taken place, that there is a fair chance for success, if the society should be revived. Higher education has become an established fact, and it is proved that colleges can require a genuine preliminary examination and a graded course of at least three years, and still have enough students to remain in existence. The overcrowding of the profession, the rising intelligence of the people, and the enactment of State laws, have each contributed to make thorough training somewhat more desirable to the aspirant for professional honors. The dental profession has shown us what may be attained by combined effort on the part of the teaching bodies; and the same benefits may be secured, if we are wise enough to sink personal and local interests in an earnest effort for the good of the profession in general. The success of any movement in the right direction will be largely determined by the action of New York. If her great schools can be induced to declare for the higher standard, the question will be easy of solution. But if she persists in graduating physicians after two terms of instruction, the other colleges can only advance their requirements by greater pecuniary sacrifices than some of them can bear.

OLIVE OIL FOR BILIARY CALCULUS.

DR. SKELLY reports favorably on this remedy in the *Weekly Medical Review*. The history of this remedy is singular. Lauded to the skies for its supposed efficacy in causing the discharge of numerous biliary concretions found in the feces, it fell flat when these were found to consist of elements derived from the oil itself. Still, the recommendation spread faster than the denial, and the journals continued at intervals to record the experience of those who used the oil with apparent benefit. At present it seems

that both parties were right and wrong. The fatty bodies discharged are certainly derived from the oil itself, but, on the other hand, it is certain that its administration is followed by marked improvement. This may be due to the action of the oil upon the bowels, as a laxative, which it exerts in common with phosphate of soda, cold enemas and other reputed remedies in this disease. Or, it may depend upon the soothing action of the oil upon the catarrhal duodenal mucosa, in which case petrolatum might be found still more beneficial. Finally, olive oil may act as a special nutrient, or it may furnish to the bile some element which tends to limit the accretion of the biliary salts, or to dissolve concretions already formed.

WILL our exchanges kindly refrain from attributing to this journal the statement that "nothing so quickly restores tone to exhausted nerves and strength to a weary body as a bath containing an ounce of aqua ammonia to each pail of water." We never said it, and we don't believe it.

Letters to the Editor.

NITRE IN THE TREATMENT OF AGUE.

CHILL and fever frequently resists the curative influence of quinine and arsenic, tends to become chronic and very protracted, leading to great physical exhaustion and incurable organic lesions.

I have discovered that *potassii nitras* is an unusually effective agent in the treatment of chill and fever. To speak summarily, I have, during the past five years, tested it most fully. At least sixty-five per cent. of all the cases treated have been cured by the administration of a single dose; thirty-five per cent. were uninfluenced by repeated doses. The best results were obtained when administered during the premonitory stage which usually ushers in the chill. Twenty-five or thirty grains given at this period will either abort the chill or materially shorten its duration. The febrile stage is correspondingly shortened or reduced to a minimum. A second dose is seldom required; relapse is infrequent. Recent attacks, as well as protracted conditions, were alike cured by the administration of a single dose; while cases apparently similar, corresponding in character and duration, were not relieved. Other forms of intermittent, not associated with chill, were not benefitted in a single instance.

In the employment of *potassii nitras*, I have kept the cases treated under close observation, and have observed the greatest accuracy in noting results. At my request, a few physicians in the country, where chill and fever prevails extensively, have employed the salt. Their experience was identical with mine as to the unusual rapidity and permanence of cures; the proportion of cures has, however, not quite equalled mine.

That a disorder extending over a protracted period of months or years, characterized by the regular occurrence of periodic malarial paroxysms, and presenting the characteristic evidences of chronic mala-

rial poisoning, should be instantaneously cured by the administration of a comparatively infinitesimal quantity of *potassii nitras*, a rapid restoration to health following, without subsequent treatment and without relapse, does not accord with our experience in the use of medicine, and may justly be held as new and unusual.

I have no theory to offer in explanation of the action of the salt. To attempt to render a reason would be a mere matter of doubtful speculation.

The clinical history and pathological results of the malarial poison have been profoundly studied and most fully elucidated, notably in the great work of Prof. Joseph Jones, M.D., of this city; but of the peculiar paroxysmal phenomena arising from the action of the malarial poison in the system, our knowledge is merely speculation; many elaborate theories have been offered, but they amount to little more than a plausible hypothesis.

Is the malarial poison an organism? This theory is accepted as the most rational view; yet, though claimed to have been proven, it has not been fully and satisfactorily demonstrated to be a fact.

If the poison is an organism, are the manifestations in the system—chill and fever, intermittent, remittent, congestive, pernicious, etc.—due to the intensity of the cause, degree and rapidity of development and reproduction, or to some modifying property in the system invaded, or are there a variety of organisms, each differing in effect and determining the special result? Scientific research has failed to throw any new light upon the subject. Without positive demonstration, the whole matter, in the present state of our knowledge, may be considered as *veiled in profound darkness*.

In order to determine the exact value of *potassii nitras* in the treatment of chill and fever, I would request the profession to give it a full and careful trial, and favor us with the result of their experience through this journal or by direct communication.

A large proportion of the morbid conditions of the system which we are called upon to treat, particularly in the Southern States, are directly of malarial origin, or are aggravated by a pre-existing malarial cachexia; consequently, this subject, more than any other, should enlist the attention of every Southern physician. Prof. Joseph Jones, M.D., has given to the profession a work which, both in America and Europe, is held to be the most thorough and complete on this highly important subject. Every physician who practices in a malarial region should possess his volumes and study them carefully.

J. D. HUNTER, M.D.

352 TULANE AVE, NEW ORLEANS.

CREOSOTE IN PHTHISIS.

WILL you kindly tell me the best way for the use of creosote in phthisis? Give me formula to be used internally and also by inhalation.

F. A. STUBBLEFIELD.

EL PASO, ILL.

[Whatever benefit is to be obtained from creosote is due to its action in disinfecting the intestinal canal; for which purpose it may be given in pills, one-half

grain to each. If the germicidal action be sought—that is, if we wish to introduce enough into the body to render it impossible for the bacillus to live therein—the most successful method of rapidly saturating the body is the hypodermic injection of creosote in liquid cosmoline, one part to twenty. Of this, the French claim to have injected a scruple of creosote in one day. We have not succeeded so well, and have no confidence in the theory. Inhalations can be given simply from hot water. Dr. J. Lewis Smith recommends equal parts of creosote, spirits of chloroform and alcohol; nine to twelve drops internally at a dose, and fifteen drops to be used in a Robinson inhaler. Internally, the dose is to be increased to toleration, if you wish the germicidal action.—W.F.W.]

PRACTICE IN NORTH CAROLINA.

CAN an Englishman, having good English and Scotch medical degrees, also M.D. from one of the leading American universities, practice in the State of North Carolina without having to undergo a local examination? and, if examination be compulsory, to whom must application be made for information as to date, subjects, fees, etc.?

In, I believe, the first or second volume of the *Medical Register*, a receipt was given for the preparation of a fluid for the prevention of rust on steel instruments. Some of my back numbers have been destroyed, and I am unable, in the preserved ones, to find the receipt.

WILMINGTON, N. C., Feb. 7, 1890.

The North Carolina law does not recognize the diploma from any college or licensing body. All applicants to practice must go before the Board. It meets annually, at the time and place of meeting of the Medical Society of North Carolina—this year at Oxford, on the 26th of May—and until all applicants are examined; the fee is \$10.

A temporary license, good until the annual session of the Board, can be obtained at any time.

THOMAS F. WOOD.

We are unable to find the item referred to, but if our correspondent will coat his instruments with an alcoholic solution of gum mastich he will find it most valuable.

Book Reviews.

HAND-BOOK OF MATERIA MEDICA, PHARMACY AND THERAPEUTICS. By SAM'L O. L. POTTER, M.A., M.D. Second Edition. Philadelphia: P. Blakiston, Son & Co., 1890. Pp. 766.

The usual introductory chapters appear, giving the classification adopted, etc. In Part I the author treats of materia medica. The topics are arranged alphabetically; probably the worst method that could be adopted, and one whose defects are vainly attempted to be obviated by exceptions which simply destroy its only advantage; that of ease of reference. This necessitates the addition of an index occupying thirty-eight pages. Part II treats of pharmacy and prescription writing, the directions being brief and

pointed. Part III treats of special therapeutics, and this goes far to obviate the objections we have made to the first part. In the appendix a number of subjects are considered, a knowledge of which is useful to the physician, but hardly appropriate to a work of therapeutics. Thus, the work may be said to be a combination of two: first, a work upon therapeutics for the student who studies drugs; second, a work of reference for the practitioner who seeks remedies for diseases. There are few writers who have mastered the art of condensation so as to accomplish both objects in the limits of a single volume as well as Dr. Potter. In this, lies the chief merit of the book; the subject matter is compressed into the fewest words, and yet clearness of expression is retained, making it a very good text-book for students.

ELECTRICITY IN OUR HOMES AND WORKSHOPS. By SIDNEY F. WALKER. 12mo, pp. xv—316—320. London and New York: D. VanNostrand & Co.

This little work deals with the agent as used in the service of our houses, and it is just the book for non-professionals to own. The glossary of terms and description of circuits is exceedingly clear and "understandable"—to coin a word. So much cloudiness is wrapped around the physics of electricity as to discourage learners; but any one can understand the main points—in fact, all that is needed, so far as the application of this force is concerned, in every-day work in the house or workshop, by reading this book. The illustrations are abundant, the typography excellent, and no one will regret the purchase after reading the first chapter.

MANUAL OF SKIN DISEASES. By W. A. HARDAWAY, M.D. Square octavo, pp. 434. Price, \$3.00. St. Louis: Theo. F. Lange, 1890.

The author gives us, first, a general introduction to the study of skin diseases, then an alphabetical arrangement of diseases for ready reference, and, finally, an appendix with formulas and a diet table. The subjects are well considered, the matter concisely stated, and quite an extensive line of reading has been condensed into this small work. We commend the book to the favorable notice of our readers.

Pamphlets.

Reformation in the Practice of Medicine by the Dosimetric Method of Practice; with Biographical Sketch of Dr. Ad. Burggrave. By J. E. McNeill, M.D. Reprint from the *Dosimetric Medical Journal*, July, 1889, New York.

The Cure of Crooked and Otherwise Deformed Noses. An Address delivered before the Philadelphia County Medical Society. By John B. Roberts, A.M., M.D.; Prof. Anat. and Surg. in the Philad. Polyclinic, Lect. Anat. Univ. Penna., Surg. St. Agnes Hosp. Pp. 24. P. Blakiston, Son & Co. Philadelphia, '89.

Exhibition of an Improved Apparatus for the Therapeutic Use of Compressed and Rarefied Air, with remarks on the Home-treatment of Pulmonary Affections. By Solomon Solis-Cohen, A.M., M.D. Reprinted from *The New York Medical Journal*, November 23, 1889.

Erythroxylon Coca; Its Value as a Medicament. By Marc Laffont, M.D., Paris. *Ibid*, December 7, 1889.

The Medical Digest.

A RUSSIAN recommends the use of sunflowers in ague.

A COSSACK suggestion is to dress wounds with ashes obtained by burning cotton or linen stuff.

DIURETIN, a sodio-salicylate of theobromine, is recommended as a diuretic, given in doses of one grain, up to six times daily.

PHENYL-URETHAN is said to be an efficient antipyretic in rheumatism, in doses of $7\frac{1}{2}$ grains, given in wine, to prevent collapse.

DIODO-SALICYLIC ACID is said to succeed in rheumatism when the salicylates fail. The daily dose is from 15 to 60 grains; usually not over $22\frac{1}{2}$ grains.

A WRITER in the *Med. World* makes the singular combination in treating orchitis, of the local application of liquefied carbolic acid to the scrotum and the internal use of homœopathic tincture of pulsatilla.

FOR UMBILICAL HEMORRHAGE.—Dr. Laycock (*Med. World*) reports a case in which he succeeded in checking the hemorrhage by applying plaster of Paris thickly, secured with a compress and bandage.

In the *Indian Medical Gazette*, a writer reports 63 cases of cholera treated with oil of eucalyptus; the mortality being 19 per cent. To adults, he gave five minims, in milk, every fifteen minutes, for four doses; then every hour.

FOR HEPATIC COLIC.—

R.—Campho-phenique 3 ij
Etheris 3 iv
Syr. zingiberis ad 3 iv

M. S.—3j to 3ij every 5 hours.

—*Weekly Med. Review.*

COAL OIL.—Mix one pint of coal oil and one ounce of nitric acid. Let it stand for a week, and pour off the supernatant oil. This does not have the odor of coal oil; it relieves all forms of pruritus, and nearly "all pain, from toothache to gout and rheumatism, pain in the lungs and pleura, etc."—*Med. World.*

FOR TUBERCULOSIS AND CHRONIC BRONCHITIS.—

R.—Terebene 3 iv
Pulv. acacie 3 iij
Aquæ 3 ij
Syr. zingiberis 3 j

M. S.—Dose, a teaspoonful.

—SMITH, in *Med. News.*

LEMOINE (*Bull. Gén. de Thér.*) recommends enemata of sublimate solution in dysentery. The solution employed varied from 1 to 5,000 to 1 to 3,000. In some cases a single enema proved sufficient to cure. The liquid was injected while warm, about seven ounces at a time, and was retained up to ten minutes.

CAUSES OF LOCAL RETURN OF CANCER.—Haidenhaim says that when the axilla is carefully cleared out, cancer rarely returns here, but begins in the front of the chest, near the original seat.

The whole breast is liable to be infected with the cancer cells which are carried through the lymph channels, and very often small infected parts of the breast have been attached to the fascia of the pectoralis major. If the breast is adherent to the fascia, the latter is doubtless infected. The only safety lies in the entire removal of the muscle, as it is impossible to remove the entire fascia.

—*Cent. f. Med. Wissensch.*

MERCURY IN SCARLET FEVER.—C. R. Illingworth reports, in the *Provincial Medical Journal*, five cases of well-marked scarlet fever in one family. Each aborted in seven days by the use of biniodide of mercury. His formula was:

R.—Solut. hydrar. bichlor. 3vj.
Potassi iodidi gr. xv.
Spiritus ammon. comp. 3j.
Syrupi 3ss.
Aquæ ad 3viss.

This was given every two hours, whilst every four hours the throat was sprayed with a solution of 1-2000 biniodide in sodium iodide.

SOLUBILITY OF NEW MEDICINES.—The following table of solubilities of some new medicines may be useful to some of our readers:

One part of	Is soluble in		
	Water.	Alcohol.	Ether.
Antifebrine	200	10	10
Antipyrin	1	1	50
Antithermin	slightly sol.	slightly sol.	slightly sol.
Cocaine hydrochlorate	5	10	
Iodol	5,000	3	1
Paraldehyd	10		
Pyridine	1	1	
Quinoline tartrate	80	150	
Resorcin	1	1	
Salol		5	5
Thallin (sulphate)	7	100	
Thallin tartrate	10		
Urethane	1	0.6	

—*Pharm. Record.*

THE CHOICE OF METHODS IN THE TREATMENT OF UTERINE CANCER.—The modern methods by which the removal of uterine cancer is essayed are chiefly three in number, as follows:

1. Amputation or excision of the diseased structures by knife, scissors, or curette.
2. Actual or chemical cauterization.
3. Extirpation of the entire uterus.

Having considered the relations which each of the three prominent methods of dealing with cancer of the uterus sustains to the questions of immediate mortality and remote results, the author draws the following deductions:

Partial amputation is, doubtless, a beneficial procedure. With a low rate of mortality—probably not exceeding 5 or 6 per cent.—it has, in many cases, removed the disease permanently, and, in others, stayed its progress and prolonged life.

In a still greater degree, cauterization has been shown to be potent for good. The recently-published results obtained by Dr. Byrne are wholly without parallel, both in the extremely low death rate, and the greatly-prolonged immunity from disease. Dr. Byrne's report is unquestionably by far the most favorable showing that has ever been made concerning any method of treatment for uterine cancer in any considerable number of cases; and, as such, it distinctly challenges our consideration.

Hysterectomy is a ghastly failure. Not only has it given worse results—both immediate and remote—than other methods of treatment for cancer of the uterus, but I affirm that it is worse than no treatment at all. A hundred women, with uterine cancer, will live a greater aggregate of years, if left alone, than if subjected to hysterectomy.

—Reeves Jackson, M.D., in *Medical News*.

THE TREATMENT OF CROUP.—The treatment of croup proper divides itself into the treatment of the three varieties:

1. Simple catarrhal laryngitis.
2. Fibrinous bronchitis, or ascending croup.
3. Pure diphtheric croup.

The cases of the first class do well under a mild emetic—such as syrup of ipecac, wine of antimony, or subsulphate of mercury. After vomiting, I order steam, bichloride of mercury, chlorate of potassium, tincture of chloride of iron, and warm applications to the throat and chest. If the fever is high, I give antipyretics. When the dyspnoea is unusually intense, a hot general mustard bath, or operative interference may be called for. As the laryngeal trouble abates, the bronchitis usually has to be attended to for some time longer.

In the second variety of croup, the prognosis is very gloomy. Jacobi saved a patient by putting him into the bath room, and keeping him in an atmosphere opaque with steam. Where this is not practicable, steam from slaking lime or croup kettles is indicated. An occasional vomit can do no harm, and may loosen membrane. Flaxseed to the neck and chest, bichloride of mercury, and free stimulation are indicated. When the stenosis becomes threatening, it may be necessary to operate, although these cases offer very poor chances of ultimate recovery. In intubating, use small tubes, so that they may be readily coughed out, allowing detached casts to follow. But tracheotomy seems to offer better chances in these cases.

In the third class, with the first evidence of croupy cough, I at once put the children on large doses of bichloride of mercury, and I have repeatedly witnessed the croup entirely disappear in twenty-four hours. Of course, when the case progresses from bad to worse, with increasing dyspnoea and cyanosis, operative interference by intubation of the larynx is required, and, when no complications exist or develop, is followed by the most favorable results.

The sick-room should be kept warm—at about 70° F. The use of nasal injections I strongly recommend from the outset. I am accustomed to employ the ordinary glass syringe, tipped with soft rubber. The

liquid employed is a solution of common salt in warm water, less than one-half per cent., although there is no objection to limewater, boric acid, or other mildly antiseptic preparations.

—A. Brothers, M.D., in *N. Y. Med. Jour.*

APPLICATION AND ACTION OF ELECTROLYSIS ON SOLID TISSUES.—This is the preferable method when one wishes to act on subcutaneous tissues without injury to the skin. Kuttner has used this method in nine cases of struma, with the result that two were cured and five were very much improved. Electrolysis is best adapted to the large, soft, strumous tumors, and twenty or thirty sittings of ten minutes' duration, repeated every two or three days, generally suffice to cure. It can be used in utero-pharyngeal tumors, and in enlarged prostate; but as relief in the latter is generally needed immediately, this method can be used only when there is no hurry. Where it is not necessary to spare the overlying tissues, electrolysis has no advantage over the knife. In the treatment of naso-pharyngeal tumors, electrolysis is unrivalled. By this method the prognosis is favorable, while removal by other methods gives 50 per cent. mortality. Stricture of the urethra is helped by it, but further experiments are needed in the case of thyroid tumors. It is especially adapted to local absorption or destruction of tissue, and in the latter respect is on a par with the galvano-cautery or Paquelin. The latter may be quicker and more intense in its action, but the former is easier to control, and does not destroy so much tissue.—*Deut. Med. Zeit.*

AN INQUIRING EDITOR.—The editor of the *American Lancet*, of Detroit, in a recent article, headed "Are Baking Powders Injurious to Public Health?" concludes with the determination "that the matter of the healthfulness of baking powders remains an open question, with a probability that the whole brood of baking powders, while convenient, afford the least healthful mode of aerating bread. As bread is the one article of constant and general consumption, it would seem most desirable that farther studies should fairly and finally settle the moot question, unbiassed by the trade interests at stake." The editor who makes this suggestion, having an M.D. attached to his name, would naturally be supposed to be the most likely person to make these farther studies; but he excludes himself by his evident dense ignorance of the chemistry of baking powders, which is inexcusable in a medical editor when he attempts to arouse the public through the medical profession against imaginary danger. Inferentially, he states that baking powder is an inferior substitute for leaven, ignoring the important fact that leaven acts upon dough by a process of decomposition, while baking powder acts as a chemical mechanical agent to produce the same result in a clean and always certain way. Next, he classes cream of tartar, calcium phosphate (which he misnames phosphoric acid) and alum together; and, after admitting that these different drugs are harmless in small doses, asks, if used in the preparation of food, are they harmless? Would he ask a similar question about

bichloride of mercury, iodine and rhubarb, all of which, in small enough and proper doses, are harmless. He leads us to infer that the chemical action which takes place in baking can convert a harmless acid or alkali into a violent poison. Next, in quoting from Prof. Mallet, he makes the very funny blunder of reading that gentleman's strictures upon alum powders, which generally contain acid phosphate of calcium, as directed against a pure acid phosphate of calcium baking powder containing no alum—a baking powder which every chemist and food expert in the land commends, and against which even the most unscrupulous competitors cannot say a word. These exhibitions of ignorance are inexcusable in a physician, especially when he ventilates them in a medical journal. Besides all this, it is a notorious fact that not one loaf of bread in a thousand is made with baking powder; but this, not being within the ken of medical men, we can overlook. Let the editor study up Atfield, or any other elementary work on chemistry, or even a good cyclopædia. Such a lack of chemical information accounts for such amusing questions as asking the difference between saleratus and bicarbonate of soda, or talking about potash lye when handling caustic soda.—*Amer. Analyst.*

CONCLUSIONS REACHED BY THE HYDERABAD COMMISSION ON CHLOROFORM.—"The experiments recorded lead the Commission to consider that dogs are very susceptible to anaesthesia by chloroform vapor. Insensibility is rapidly induced, and these animals are easily killed by chloroform. The susceptibility varied somewhat with the size of the animal. In strong and healthy dogs, however, the results were comparatively uniform, although the differences between the maxima and minima of certain events might lead to the opposite conclusion.

"The main point in the chloroformization of dogs is to watch the breathing. In all cases where artificial respiration was begun immediately after the natural respiration ceased, the animals recovered.

"Artificial respiration is useless in the vast majority of cases, if respiration has ceased for more than fifty seconds, and even after fifty seconds it is not invariably successful.

"The animals could be revived in every case if not more than thirty seconds had elapsed after cessation of natural breathing.

"In no case was artificial respiration of use after the heart had ceased to beat, and in only one case was it successful when the heart-sounds were barely audible.

"Rapid induction of anaesthesia is succeeded by rapid elimination of the chloroform.

"There is very little tendency to a cumulative effect of the chloroform as long as the process of respiration is not interfered with. Such an effect is, however, distinctly marked when the quantity of air leaving the lungs is materially decreased.

"The more concentrated the vapor, the more rapid the anaesthesia, and (unless an overdose be given, which would interfere with the functions of the respiratory centre, and therefore with the elimination of the chloroform) the more rapidly is the return to

consciousness re-established. In no case did the heart cease acting before the respiratory muscles. In no case during the anaesthesia did the irritation of the vapor on the terminal fibres of the afferent nerves of the nasal, pharyngeal, laryngeal or pulmonary mucous surfaces, or impulses from any other afferent nerves, produce anything stimulating reflex inhibition of the heart's action.

"In no case did cardiac syncope occur. The Commission considers that it is impossible for chloroform vapor to kill a dog by acting primarily on the heart, and this holds good, no matter in what doses or in what manner the poisoning by inhalation is induced.

"It is the opinion of the Commission that death from chloroform narcosis in dogs is absolutely avoidable, and ought never to occur from surcharging the blood with chloroform. Once anaesthesia is induced, so long as the respiration is kept up, there is no fear of a cumulative effect.

"The drug is rapidly eliminated. Interference with this elimination brings about changes in the inspiratory mechanism which ought to arouse suspicion and prepare us for artificial respiration."

—*Provincial Med. Jour.*

THE TREATMENT OF MEASLES.—This very interesting subject is exhaustively discussed by Dr. R. B. M'Call, of Georgetown, Ohio, who ascribes to the disease the importance which justly belongs to it. He says that the disease is one of a more serious nature than is usually believed, and claims that a large percentage of those who take the disease in adult age die within three years afterwards, from some of the complications. In speaking of the management of the disease, he has touched every possible phase of the disease. For the constipation which frequently is present, he recommends one of the following prescriptions:

R.—Salol,
Bismuth subnit. 3ss.

M.—Div. in chart No. vi, vel ft. capsule No. vi.
Sig. One every three or five hours.

Or salol alone, according to the following:

R.—Salol 3j.

Sig. Fill ten capsules, and take one every three or five hours.

Should there be any tenesmus, he recommends the following:

R.—Bismuth subnit. 3ij.

Tr. opii. gtt. lxxx.

Neutralizing cordial 3xxiv.

M.—Sig. Teaspoonful frequently repeated if required.

He proceeds to say that: In any event, it may be best to commence treatment with laxatives. A neutralizing cordial will answer, or the following, repeated:

R.—Ext. cascara sagrad ʒij.

Elix. cascarae ʒxxxij.

Sig. Teaspoonful.

Or, one of the following powders:

R.—Hydrarg. sub-mur. gr. j.

Pulv. pepsin ʒj.

M.—Et. div. in chart No. iv.

Sig. One, to be repeated or not, as may be indicated.

Should there be a persistent discharge from the eyes, employ one of the subjoined unguents :

R.—Hydrarg. sub-mur. gr. x.
Vaselin (white) 3iv.

Or,

R.—Hydrarg. ox. flav. gr. v.
Vaselin (white) 3iv.—M.

A useful collyrium is the following :

R.—Zinci sulph.
Morph. sulph. 3a gr. ss.
Aque rosæ 3viii.

Sol.—Sig. A few drops instilled in eyes two or three times a day.

For the coryza :

R.—Cocaine hydrochl. gr. v.
Aq. rosæ (fresh) gr. c.

Sol.—Sig. Throw five or ten drops into nares, and repeat till anæsthesia of Schneiderian membrane is produced, or, brush the walls of the nasal cavities; also, apply to posterior nares and pharynx.

When there is offensive discharge, instil or inject a mild solution of carbolic acid (acid carb. ol., gtt. 2 to 5, aq. pur., 3j); a solution of campho-phenique (campho-phenique, water, or glycerine, equal parts); listerin (listerin, 3ij, aq. of glycerine, 3viij), or iodoform, of the strength of five grains to the fluid ounce of the menstruum. Iron, strychnine, and cod-liver oil are frequently necessary.

In the treatment of the bronchitis, a mustard cataplasm must be applied to the chest, for young children; made weak; or, for the latter, a spinal plaster. Camphor stupes afford great relief. As a stimulant and resolvent, give the following :

R.—Ammon. carb. 3ss.
Syr. simplicis vel tolu. 3xvj.

M.—Sig. Half teaspoonful for a child; one to two teaspoonfuls for an adult.

When the pulse is full and strong :

R.—Ammon. carb. 3ij.
Syr. scil. comp.,
Spt. æth. comp.,
Syr. tolu. 3a 3viij.

M.—Sig. From one-half to two teaspoonfuls, repeated as often as may be required.

When the cough is very difficult, benefit may follow the use of this :

R.—Antimon. potas. tart. gr. j.
Potas. chlorat. gr. x.
Aq. menth. pip. 3xxxij.

M.—Sig. Teaspoonful.

When the chronic form is assumed, with or without asthmatic respiration, the following may be used with advantage :

R.—Ext. grindelia robusta f3iv.
Glycerine,
Syr. tolu. 3a 3viij.

M.—Sig. From one-fourth to one-half teaspoonful to a child; from one to two teaspoonfuls to an adult.

In pneumonia, stimulants and derivatives must be energetically and quickly applied. From the beginning, reliance should be placed in quinine, taken in small, often-repeated doses; as a febrifuge, aconite in small doses. For the sthenic form, give Norwood's tr. verat. vid., in minute doses, every hour or two, till pulse and temperature are reduced. Give milk

regularly, day and night. Beef tea, if well borne, may be taken. Artificial peptonized foods may prove advantageous.—*The Medical Standard.*

FRENCH NOTES.

Translated by A. E. Roussel, M.D.

PHTHISIS (Alexandre Doehmann).—

R.—Calomel 0.72
Pepsin 3.75
Extract of hyoscyamus 0.36 to 0.6
Extract of conium, q. s. for 60 pills.

The first day, the patient will take two pills every hour until six doses are taken; the second day, he will take five doses, the third, four; and after this time, two pills three times daily during the continuance of the calomel treatment. After the fifth or sixth day, an interval of two or three days may be allowed. During these intervals, iodide of potassium will often give good results. The first dose administered will depend upon the fever; later, it is again this symptom which must be taken into consideration in increasing or diminishing the dose. It is unnecessary to add that this treatment may be employed together with the air cure or the koumiss cure.

—*Revue de Thérapeutique.*

TREATMENT OF INFANTILE CHOLERA (Dr. Baginski, of Berlin).—The principal aliment of the child, milk, is the best nourishing soil for the microbes; therefore the author thinks that, in certain cases, it will be absolutely necessary to suppress all alimentation, or in all cases to restrict it to a great extent.

Starting with this precept, M. Baginski mentions some other indications relative to treatment; in all light cases mild antiseptic agents, such as calomel or small doses of vinegar, are indicated. We must make use of cooling drinks, apply cold fomentations, administer stimulants. If a condition of collapse becomes manifest, suppress all aliment, administer iced tea, strong coffee, cognac; make use of injections of musk or ether; use mustard baths; avoid all opiates, the use of which may cause death.

In some cases, cold envelopings, expectorants, intestinal irrigation, or diuretics are necessary. In conclusion, the therapeutic indications are variable, and depend greatly upon the symptoms.

—*La France Méd.*

UROBILINURIA IN DRUNKARDS (Prof. Hayem.)

—The extreme frequency of urobilinuria in fever-patients or others, which I have observed at the St. Antoine Hospital, seems to be caused by the fact that most of these patients are confirmed drunkards, or at least persons who indulge in drink. A great number of those who enter the hospital without any malady which would in itself produce an excretion of urobiline, have their urine charged with it. At the end of several days, or a week, perhaps the day after admission, the urobilinuria diminishes, as a result of the rest and change of diet; but it does not disappear, and the patients generally admit their alcoholic habits. We can find, however, no other symptom of disease of the liver, the urobilinuria being the only sign of alteration produced by alcohol in that organ.

In febrile maladies, urobilinuria is observed in

various degrees of intensity. But if we take one of these maladies, typhoid fever for example, we will be struck by the fact that, in certain cases, the urobilinuria will be absent or insignificant; in other cases, on the contrary, quite pronounced. This last fact is again related to alcoholism; and, when well marked, it is of a nature to affect the prognosis. The same rule holds good in all other acute maladies. Other things being equal, the intensity of the urobilinuria ought to cause suspicion as to the existence of hepatic lesion due to alcohol. In a great number of my observations the urobilinuria has diminished during convalescence, but still persisted as witness of a bad state of the liver, the existence of which was anterior to that of the acute malady.

In conclusion, the object of these remarks is to attract again your attention to the chemical examination of urinary pigments. I am certain that you will be able to derive great advantage, in the point of view of diagnosis and prognosis, of numerous morbid states. In terminating, I will recall to you that, in a case of jaundice, if you wish to be exact, it is necessary to add, to the examination of the urine, that of the serum of the blood.

—*Revue de Thérapeutique.*

SCROFULA (Dr. Dandois).—According to our author, the scrofulous diathesis does not exist; the characters assigned to the strumous facies are purely arbitrary; the manifestations the most numerous and the most characteristic of scrofula are local tuberculous infections; the others have nothing characteristic, and do not differ from ordinary inflammations, excepting by their evolution and their duration. All that remains as an attribute of scrofula is a greater vulnerability of certain tissues of the economy, particularly of the skin and mucous membranes—a lesser resistance towards certain morbid causes—resulting in a defective vitality, hereditary or acquired.

It is true, that the word, scrofula has remained in use; but, if we wish to retain it, it should lose its meaning of the past. But why retain a word which is a stigma of infamy in the eyes of the public, if not of the physicians?

—*Revue de Thérapeutique.*

M. WURTZ communicates to the Société de Biologie the result of his experiences on the bacteriocide power of the white of egg. Cultures of the bacillus anthracis were placed in tubes containing the white of egg, and the same quantity of culture was placed in tubes containing gelatine. If the two preparations are examined at the end of an hour, we find that the micro-organisms have completely disappeared from the first tube, while the other is covered with anthrax. This power is not equal for all the micro-organisms; some resist for a longer time; but they will all have disappeared at the end of six hours. These experiments will only succeed, however, if a small quantity of culture is used.

These facts seem contradictory with the experiences of authors who state having seen the passage of bacilli through *la coque de l'œuf*; but, doubtless, the quantity of culture used was considerable.

—*La Tribune Médicale.*

THE CONTAGION OF TUBERCLE.—In a communication to the Academy of Medicine, M. Germain Sée presented the following personal conclusions:

1. The atmospheric contagion of tubercle, that is to say the true contagion, so much dreaded, does not exist; it should be stricken out of the popular instructions which had, as the result of a grave error, so frightened the public.

2. The transmission, outside of matrimonial conditions, is made only through the dried sputa, which in itself possesses the infectious property; it is the sputa that must be destroyed, at any price, in ordering the most extreme measures necessary; it is not the patient, but the sputa which is the enemy.

3. Alimentation by milk presents almost no danger, and by meat none at all.

4. Predisposing causes are unknown in their nature and in their signs; we can neither reason as to their nature, nor combat them.

—*Bulletin de l'Académie de Médecine.*

TREATMENT OF ERYSIPELAS BY SUBCUTANEOUS INJECTIONS OF PHENIC ACID (P. Samber).—The author presents ten cases of erysipelas, treated by means of subcutaneous injections of phenic acid, according to the method of Hueter. The results of this mode of treatment have been such that he considers himself authorized to boldly affirm that all cutaneous erysipelas may be cut short by the above method. To insure complete success, two conditions are indispensable: (1) The diagnosis should be certain; (2) it is necessary that the doses of the acid injected should be sufficiently large.

When a tumefaction which presents an erysipelas aspect is not influenced by the injections of the phenic acid, we can be certain that we are not dealing with a true erysipelas. Under this treatment abscesses and other complications are much rarer than usual.

The injection should be made in the healthy skin at from one to two centimeters from the affected parts.

The following formula is used:

R.—Pure acid, 53.
Alcohol (pure) 39.
Distilled water 94.

—*Bulletin de Thérapeutique.*

ON THE FUNCTION OF THE THYROID GLAND (Dr. Fano).—The author's experiments were conducted on dogs. When both sides of the thyroid lobes were tied, the animals died with the symptoms of the extirpation. When a single lobe is removed together with maltreatment of the other, they survive for months. A dog rendered anæmic by successive bleedings did not suffer from the extirpation of the gland. Dogs anæmic from an existing cachexia, or when the solution of soda had been used, presented an amelioration in their general condition. There is, therefore, reason to attribute to the condition of the blood the cause of the cachexia and to recognize in the thyroid gland a function which consists in a kind of purification of the blood.—*Revue de Laryngologie.*

The deaths last week in Philadelphia numbered 385.

Medical News and Miscellany.

PASTEUR is in poor health.

JAPAN has 40,321 licensed doctors.

TYPHOID fever rages near Waverly, Ky.

DIPHTHERIA is epidemic in Millsboro, Del.

SCARLET fever is spreading in Bridgeport, Conn.

HARVARD medical students attend the cooking school.

CAMPHOR has doubled in price during the past month.

A ROXBORO baker is accused of using chrome yellow again.

MILK, exposed for a time to the fumes of tobacco, is poisonous.

A RACINE woman is fasting for three weeks, to get rid of dyspepsia.

A FATAL epidemic, resembling meningitis, is raging in Cook County, Texas.

BLINDNESS is often due to carelessness with the eyes of newly-born children.

AN exhibit of nurses' costumes is to be held at the Charing Cross Hospital, London.

A MAN in Joliet, Ill., who was shot, lived eighteen months with the bullet in his brain.

A CHILD in New York city died from eating chocolate drops containing arsenic.

DR. WHITAKER lectured before the Millville Y. M. C. A. on Respiration and Circulation.

MISS EDITH WARD is the first lady Fellow of the Royal College of Surgeons, in Ireland.

GOOD health is said to be induced by employment around natural gas and petroleum wells.

A NEW hospital will be opened next month, on North Broad street, near Germantown avenue.

DR. DYSON, the alleged cocaine embezzler, was discharged, on promising to abstain henceforth.

PERSONS desiring to marry, in Brazil, must first pass a medical examination, to prove their fitness.

London Figaro states that the Czar of Russia injects from twelve to fifteen grains of morphine daily.

SINCE the visitation of la grippe, many school children are said to be affected with bleeding at the nose.

THE Children's Aid Society has been awarded \$13,000, the assets of the defunct Pauline Temporary Home.

PILOCARPINE, remarkably efficacious in relieving the itching of ordinary jaundice, fails in cases due to carcinoma. The late Mr. Imgard took this remedy at the writer's suggestion, but obtained no relief therefrom. We have not as yet received advices as to the holding of an autopsy in his case.

THE use of saccharine, in France, has been restricted, as its antiseptic nature, when used in large quantities, retards digestion, neutralizing the gastric juice.

EGGS kept in a refrigerator become unwholesome, owing to the formation in them of a microscopic fungus.

A LEICESTER (England) butcher has been fined for offering horseflesh for sale without due notice to buyers.

FOR packing foods, etc., the French prohibit the use of tin foil which contains more than 5 per cent. of lead.

NINE cases of typhus fever have been recently discovered in New York, all traceable to infection from Europe.

THE engagement of Dr. Guy Hinsdale, a promising young physician, to Miss Mary Graham, is announced.

DR. B. C. FIELD, of Denison, Texas, was robbed of \$1900.00 in a passenger car in the depot at Little Rock, Ark.

AN intoxicated man died in the Episcopal Hospital while resisting the efforts of the surgeon to dress his broken leg.

A COLORED hoodoo doctor in West Chester has been brought to justice for practicing medicine without a diploma.

THE sanitary inspection of school-houses, by the Indiana State Board of Health, has produced unfavorable reports.

J. H. SCHOENBERGER, of Pittsburg, lately deceased, has left a bequest for the erection of a hospital in that city.

COOPER HOSPITAL, Camden, as the residuary legatee of the late John H. Wright, receives an estate valued at \$125,000.

At a recent meeting of the Board of Education, an appeal was made in behalf of better sanitary arrangements in the schools.

SPECIALISTS in nerve troubles say that many so-called nervous diseases are but manifestations of slow lead poisoning.

A WRITER in the *Brit. Med. Jour.* records a case in which he delivered a woman aged forty-seven years of her first child.

THE Indian authorities are at last bestirring themselves on the subject of leprosy, although in a feeble and inefficient manner.

CHEMICAL analysis has shown that strychnine, gentian, and colombo are used as substitutes for hops, in making beer.

THE *British Medical Journal* protests against the publication of prescriptions in daily papers, as a mischievous proceeding, and one to be condemned by professional opinion.

THE University of Toronto was damaged by a fire to the extent of \$1,000,000. The library, valued at \$100,000, was destroyed.

At the Liebig meat extract establishment at Fray Bentos, Uruguay, 1000 oxen are killed daily during seven months in the year.

THE Sheltering Arms, Polyclinic Hospital, Visiting Nurse Society, and Lying-in Charity, received each \$2150 from the Charity Ball.

IN the manufacture of beer, corn is substituted for barley, resin is freely used, and salicylic acid is employed to prevent souring.

A. LAPHORN SMITH, in the *Provincial Medical Journal*, speaks very highly of the Bailey rheostat, made by the Law Telephone Co.

THE Bellevue Hospital Training School for Male Nurses, in New York, is in a prosperous condition, and is constantly filled with pupils.

DR. BILLINGS, of New York, uses carbolic acid in cauterizing the bite of a rabid dog, it being less powerful and more effective than hot iron.

THE Devils Lake Indians, who are destitute of food, clothing, and medicine, are dying from the effects of disease and inclement weather.

WORRY is a foe which, after it has slain its victim, is known by the name of heart disease, apoplexy, consumption, or some other familiar title.

THE St. Paul girl who died from blood poisoning has been disinterred, and it is thought that the poison came from the air, and not from her gloves.

MME. SOLOMON DE ROTHSCHILD contributed \$5000 to the Frenchwomen's Union, for their work in caring for influenza patients among the poor of Paris.

THE managers of the University Hospital have offered, for this year, free treatment in that institution for the pupils of the school-ship Saratoga.

THE leaves of the sycamore, horse-chestnut, and plum trees are used as adulterations to increase the bulk of tea, and sulphate of iron imparts flavor.

A CATHOLIC missionary has undertaken the establishment of a leper hospital in Gotomba, Japan, there being a great number of victims in that country.

A JAPANESE princess is in Berlin, studying the management of hospitals and charitable institutions, in order to found similar ones in her own country.

OLD records tell of an Englishman who died at the age of sixty-five, and yet had taken, during his lifetime, 226,934 pills, and 40,000 bottles of mixtures.

DR. KING, an American lady who is physician to a family at Shanghai, has increased her reputation there by successfully performing a delicate operation.

DR. FARNIER has discovered that the salts of copper do not possess the poisonous properties formerly attributed to them. Hands immersed in a solution of sulphate of copper, although they retained the sense of touch, became insensible to pricks of a needle, or cuts of an instrument.

DR. MORRISON, of Danville, Va., is said to have discovered a negro who has the power of voluntarily moving his heart from the left to the right side of his body.

THE New York Hospital is to have a garden on the roof, enclosed in glass, with seats, aquaria, plants, and hammocks, for the benefit of the patients.

ST. CLAIR and Pleasant Grove, Minnesota, advertise for physicians. The stringent law of that State is making the medical practitioner a scarce and desirable article.

OWING to the famine in some parts of Italy, animals that die of disease are buried in secret places by night, to prevent the starving people from using them for food.

A ST. LOUIS physician says that the grape fruit of Florida has a tonic nature, essential to good digestion, possessing the good qualities of the orange in an increased degree.

THE Missouri W. C. T. U. has discovered that women in the State Penitentiary, at Jefferson City, receive brutal treatment, and sanitation is disregarded in the wards.

SINCE the discovery of leprosy on Cape Breton Island, the Canadian Government has decided to retain the services of Dr. A. C. Smith, as permanent medical expert in leprosy.

A WAYNESBORO doctor rejoices in the apt name of Bonebroke; while in Philadelphia, Dr. Gruel practices in Dr. Physick's ancient bailiwick, and Dr. Toothaker extracts rebellious molars.

FRUIT essences made out of compound ethers distilled from rancid cheese, bad butter, plain alcohol, and similar ingredients, are furnished by a New York house to the soda water dispensers.

PROF. BOKAI, of Klausenburg University, recommends, for the cure of hydrophobia, a solution of chlorine, bromine, sulphurous acid, and permanganate of potash, with oil of eucalyptus.

IN November last, 3000 persons died of some abdominal affection—presumably cholera—in the Khorassan, a rich province of Persia, adjoining the most recent Russian acquisitions in Turkestan.

THE courts have dismissed the city's claim against the Pennsylvania Hospital for pipe laid on its property. Judge Gordon decided that the Hospital was exempt because it is a purely charitable institution.

IN Gresham's lectures upon influenza, he noted the fact that day laborers appeared to have an immunity against the disease, as compared to those who are paid by the week or month. The cause is not far to seek.

SAYS the British *Medical Journal*: A disordered liver has made many a one think he has sinned the unpardonable sin; and a good purge has often lifted a burden from the conscience, as heavy as that of Bunyan's Pilgrim.

As a counter-irritant in chronic pulmonary disease, etc., a warming plaster, with tartar emetic sprinkled over it, will be found very efficient. For this suggestion we are indebted to Dr. Rickards, of Philadelphia.

A CIVIL SERVICE examination was held on Friday, February 21, for the position of Physician-in-chief of the City Hospital. Among the applicants were Drs. O. F. Zacherle, J. L. Bauer, G. S. Robinson, and D. E. Hughes.

THE Alumni Association of the Philadelphia College of Pharmacy had their fifth annual good time last week. Dr. Guiteras, Mr. Kingsbury, and Misses Woodside and Coleman furnished instruction and entertainment on the occasion.

PROF. GEO. H. ROHÉ, formerly associate editor of the *Medical Times*, has been appointed Health Commissioner of Baltimore. Until his portrait appeared in the Baltimore papers, we were unaware of Dr. Rohé's close resemblance to Parnell.

As an infallible cure for drunkenness, Dr. Portugalloff, of Russia, administers a subcutaneous injection of strychnine. One grain of strychnine is dissolved in two hundred drops of water, and five drops of the solution injected every twenty-four hours.

A BILL is soon to be introduced into the New Jersey Legislature to suppress medical frauds, requiring the filing of certificates by physicians in the County Courts, and an examination before the State boards, regardless of the possession of a diploma.

DR. D. B. HALSTEAD, in a lecture before the N. J. State Board of Agriculture, referred to the dangers of ergot growing mostly on rye and grass, causing, when eaten by cattle, a numbness of limbs, and finally death. Rye bread affected by ergot is especially dangerous.

PROF. E. J. HOUSTON, in an address on the subject of Death from Electric Currents, at a meeting of the Academy of Natural Sciences, stated that the current produces insensibility, and thus prevents the agonizing suffering supposed to precede death from contact with electric wires.

THE dangers of antipyrine are now being descanted upon by the daily papers, inspired thereto by the reckless home-dosing which has been carried on during the last six weeks. Antipyrine is not so dangerous as quinine, camphor, whiskey, cherry pectoral, chloral, or opiates—drugs that are freely used at all times by the laity.

IN Germany, the payment of doctors is left to mutual agreement. If no arrangement has been made, in contested cases, the fees are fixed by the legal authorities, according to a fixed schedule. For medical advice, the charge is from 25 cents to \$1.25; visit, 25 cents to \$1.50; consultation, \$1.25 to \$7.50; post-mortem, 75 cents to \$2.50; easy labor case, 75 cents to \$5.00. The largest fees noted in surgical practice amount to about \$125.00.

—*Provincial Med. Jour.*

P. BLAKISTON, SON & Co., Philadelphia, will publish, next week, a "New German-English Medical Dictionary," by Frederick Treves, F.R.C.S., and Mr. Hugo Lang; "A Manual of the Practice of Medicine," by Frederick Taylor, M.D., and a "Text-book on Obstetrics," by Dr. F. Winckel (Munich); translated by Prof. Edgar F. Smith, of the University of New York.

A CONCERT, in aid of All Saints' Chapel, Blockley Almshouse, was given, one evening last week, at the Academy of Music. It would not be amiss, perhaps, to give a concert in aid of the inmates of that hospital. According to Bellamy's doctrine, these unfortunates have the same heritage in this world and its goodly things, as any of those who are able to work and support themselves.

IN a Philadelphia hospital, one of the staff asked for the use of an unoccupied room, to be fitted up as a gymnasium for the systematic exercise of patients after operation. The request was not granted; but, shortly after, the room was appropriated and furnished as a parlor, where the nurses could receive their visitors, and have dancing parties. Truly, it is better to be a nurse than a patient.

TWO demijohns, each containing twelve pounds of ether, were delivered to a city hospital, and deposited in the drug store, where they were not disturbed. The next morning the bottoms of both demijohns were found to be broken, and the ether escaped. Neither of the corks was tightly inserted, and it is difficult to understand why they were not blown out instead of the glass bursting. The floor was heated by steam pipes.

THE retirement of Dr. Rauch from the Illinois State Board of Health, removes from official labors one among the most active and best qualified sanitarians in the United States. His efficient labors as Secretary of the Board have gained him recognition throughout the Union, and placed Illinois among the foremost states in sanitary matters. All will regret to learn that his health would no longer permit him to discharge the duties he has so ably performed. He will still act as Secretary of the Board, and we hope his suggestions and advice, if not his labors, will continue to serve the public health of his State.

—*Sanitary News.*

NOTICE.—An Army Medical Board will be in session in New York City, N. Y., from May 1 to 31, 1890, for the examination of candidates for appointment in the Medical Corps of the United States Army, to fill existing vacancies.

Persons desiring to present themselves for examination by the Board, will make application for the necessary invitation to the Secretary of War, before April 1, 1890, stating the place of birth, place and State of permanent residence, and enclosing certificates, based on personal knowledge, from at least two physicians of repute, as to professional standing, American citizenship, character, and moral habits; also, statement of service in hospital, from the authorities thereof, is desirable. The candidate must be between twenty-one and twenty-eight years of

age, and a graduate from a *Regular Medical College*, as evidence of which, his Diploma, must be submitted to the Board.

Further information regarding the examinations and their nature may be obtained by addressing the Surgeon General, U. S. Army, Washington, D. C.

JNO. MOORE,
Surgeon General, U. S. Army.

THERE may be some connection between the influenza and the state of the atmosphere. During the epidemic of 1847, as well as the one we have just endured, the observations at Greenwich show a "very considerable atmospheric stagnation, the weekly movement being 344 miles below the average." Some of the vagaries of the distribution of influenza would be explained by this theory, as local conditions might cause stagnation or dispersion, as the case may be. But even so, there must be some definite and material thing to disperse or stagnate with the air, and so we are inevitably brought back to the microbe.

A MAGNETIC healer has located in this city, who regales her dupes with this stuff:

"It has been about four years since I received the power to heal myself and others. I was prostrated by a heavy cold, which developed into pneumonia. Upon my recovery, the attending physician said I had consumption. After spending \$3000 on doctors, in trying to effect a cure, I found myself still growing weaker, and was finally given up as a hopeless case. As I sat one day in a rocking-chair, feeling very weak and faint, my eyes became blurred and I passed off into a trance. God appeared, surrounded by a halo of glory, and it was revealed to me all that I should do. When I awoke from the trance, according to the divine directions, I rubbed my body with my hands and effected a complete cure. I then cured our minister's daughter, who was believed to be dying, and her father acknowledged that I had performed a miracle."

Terms: One dollar at office; two dollars at patient's residence.

TREATMENT OF ACUTE PNEUMONIA BY INHALATIONS OF CHLOROFORM (Dr. Philippi).—A patient, aged sixty years, of marked alcoholic habits, with a history of acute articular rheumatism six years previously, was seized with pneumonia. At the end of the fifth day of the disease, he had collapse, loss of consciousness, Cheyne-Stokes respiration, cyanosis of the face, small irregular pulse, 96 to the minute. Subcutaneous injections of ether having produced no result, our author conceived the idea of making use of inhalations of a mixture of chloroform and alcohol. The patient immediately made several profound inspirations, and at the end of an hour the cyanosis had disappeared; the pulse was stronger; the patient responded when spoken to, and the state of collapse passed away.

About sixty grammes of the mixture had been used during the inhalations. The convalescence was complete at the end of fifteen days.—*Bul. de Thér.*

To Contributors and Correspondents.

ALL articles to be published under the head of original matter must be contributed to this journal alone, to insure their acceptance; each article must be accompanied by a note stating the conditions under which the author desires its insertion, and whether he wishes any reprints of the same.

Letters and communications, whether intended for publication or not, must contain the writer's name and address, not necessarily for publication, however. Letters asking for information will be answered privately or through the columns of the journal, according to their nature and the wish of the writers.

The secretaries of the various medical societies will confer a favor by sending us the dates of meetings, orders of exercises, and other matters of special interest connected therewith. Notifications, news, clippings, and marked newspaper items, relating to medical matters, personal, scientific, or public, will be thankfully received and published as space allows.

Address all communications to 1725 Arch Street.

Army, Navy & Marine Hospital Service.

Official List of Changes in the Stations and Duties of Officers serving in the Medical Department, U. S. Army, from February 11, 1890, to February 17, 1890.

Leave of absence for twenty days, to take effect about February 10, is granted Lieutenant-Colonel J. R. Smith, Surgeon. S. O. No. 15, par. 1, Headquarters, Department of Arizona, February 8, 1890.

By direction of the President, Captain Louis W. Crampton, Assistant-Surgeon, is detailed as a member of the Army Retiring Board at Chicago, Ill., convened by War Department order dated November 18, 1889, published in S. O. 269, November 18, 1889, from Headquarters of the Army, vice Major Henry McElderry, Surgeon, hereby relieved. Par. 9, S. O. 36, A. G. O., February 12, 1890.

By direction of the Secretary of War, the retirement from active service, on February 9, 1890, by operation of law, of Colonel Andrew K. Smith, Surgeon, under the provisions of the Act of Congress approved June 30, 1882, is announced. Colonel Smith will proceed to his home. Par. 5, S. O. 34, A. G. O., Washington, D. C., February 10, 1890.

By direction of the Secretary of War, leave of absence for two months is granted Major Henry R. Tilton, Surgeon, to take effect upon his being relieved from duty at the U. S. Military Academy, West Point, New York. Par. 6, S. O. 34, A. G. O., Washington, D. C., February 10, 1890.

By direction of the Secretary of War, the extension of the leave of absence, on surgeon's certificate of disability, granted Major Leonard Y. Loring, Surgeon, in S. O. 268, November 16, 1889, from this office, is still further extended two months, on surgeon's certificate of disability. Par. 7, S. O. 34, A. G. O., Washington, D. C., February 10, 1890.

By direction of the Secretary of War, Lieutenant-Colonel Charles T. Alexander, Surgeon, is relieved from duty as examiner of recruits in New York City, and will report to the commanding general, Division of the Atlantic, for duty as attending surgeon in that city. Par. 1, S. O. 33, A. G. O., Washington, February 8, 1890.

By direction of the Secretary of War, Major Henry McElderry, Surgeon, is relieved from duty at Fort Wayne, Michigan, and will report in person to the superintendent of the U. S. Military Academy, West Point, N. Y., for duty as post surgeon, relieving Major Henry R. Tilton, Surgeon, who, after being thus relieved, will report in person to the commanding officer at Fort Wayne, Michigan, for duty at that station. Par. 13, S. O. 33, A. G. O., Washington, D. C., February 8, 1890.

Changes in the Medical Corps of the United States Navy for the week ending February 15, 1890.

BATES, N. L., Medical Director. Ordered to Naval Hospital, Mare Island, Cal.

Medical Index.

A weekly list of the more important and practical articles appearing in the contemporary foreign and domestic medical journals.

- Action physiologique de l'acide sélénieux, sur la, Chabré et Lapicque. *La Tribune Médicale*, 30 Jan., 1890.
- Antisepsis in der Augenheilkunde, Steffan. *Deutsche Medizinisch-Zeitung*, 30 Jan., 1890.
- Acute Melancholia, a case of, during the progress of which there appeared Argyle-Robertson pupil with abolished Patellar reflexion one side, and much diminished on the other, Tomlinson. *Jour. Nerv. and Mental Diseases*, Feb., 1890.
- Amputation congénitale incomplète, note sur un cas de Rouxeau. *Gaz. Méd. de Nantes*, 9 Janvier, 1890.
- Antiseptie de la femme enceinte de l'accouchée et du nouveau-né, remarques sur la, Brunon. *La Normandie Méd.*, 1 Fév., 1890.
- Automatisme ambulatoire chez un hystérique, Proust. *Le Bulletin Médical*, 2 Fév., 1890.
- Appendicitis, eight cases of, Worcester. *Boston Med. and Surg. Jour.*, Jan. 30, 1890.
- Antiseptic medicaments, remarks on, Parke. *New York Med. and Surg. Jour.*, Feb. 1, 1890.
- Acute intestinal strangulation, Barker. *British Med. Jour.*, Januar 18, 1890.
- Agent infectieux du rhino-sclérome, Hallopeau. *La France Médicale*, 10 Jan., 1890.
- Arthrotomie dans certaines formes graves du rhumatisme articulaire aigu, Dubrijadoux. *Archives de Méd. et de Pharmacie Militaires*, Janvier, 1890.
- Bakterio-chemische Untersuchungen, Petruschky und Johannes. *Centralblatt für Bakteriologie und Parasitenkunde*, 4 Januar, 1890.
- Brain, gunshot wound of the, Dickman. *Kansas City Med. Index*, Jan., 1890.
- Chores, treatment of, Ollivier. *Med. Age*, Feb. 10, 1890.
- Can diseased fallopian tubes be cured by drainage and applications to their interior? Harvey. *Indiana Med. Jour.*, Feb., 1890.
- Cirroid aneurism of scalp, Mynter. *Annals of Surg.* Feb., 1890.
- Causes générales d'insuccès dans le traitement des fibromes utérins par l'électricité suivant ma méthode, des.
- Chronic disease of the ankle and tarsus, Scudder. *Boston Med. and Surg. Jour.*, Jan. 30, 1890.
- Central motor innervation of the larynx, on the, Krause. *British Med. Jour.*, Jan. 18, 1890.
- Connecting link between the high tension pulse and albuminuria, Oxon. *British Med. Jour.*, Jan. 11, 1890.
- Complications auriculaires dans l'épidémie actuelle d'influenza, Loewenberg. *Le Bulletin Méd.*, 8 Janvier, 1890.
- Dysenterie, traitement de la, par les lavement de bichlorure de mercure, Lemoine. *Bulletin Général de Thérapeutique*, 30 Janv., 1890.
- Désinfection des appartements, nouvelles expériences sur la, et les objets qui les meublent, à l'aide de l'acide sulfureux, Aubert. *Ibid.*
- Diagnostic des stomatites, du, et de l'examen de la bouche chez les enfants, Deschamps. *La France Médicale*, 31 Janvier, 1890.
- Downward dislocation of the patella, Deaderick. *Annals of Surgery*, Feb., 1890.
- Etiologia della peritonite settica. *La Riforma Medica*, 18 Gennaio, 1890.
- Etherized nitrous oxide as a general anæsthetic in minor surgery, Lund. *British Med. Jour.*, Jan. 18, 1890.
- Ether, chloroform or nitrous oxide, Fowler. *Brooklyn Med. Jour.*, Feb., 1890.
- Empyema, remarks upon, Jacobi. *Med. News*, Feb. 1, 1890.
- Epidémie actuelle, sur la traitement de, Dujardin-Beaumetz. *Bulletin Gén. de Thérapeutique*, 15 Janv., 1890.
- Fieber und Influenza-Kur, Winternitz. *Intern. Klinische Rundschau*, 5 Januar, 1890.
- Fall von congenitaler Aortenstenose, Hochsinger. *Wiener Medizinische Presse*, 5 Januar, 1890.
- Fatty heart with dilation, Thayer. *Brooklyn Med. Jour.*, Feb., '90.
- Gout, the, prophylaxis of, Mendelson. *N. Y. Med. Jour.*, Feb. 1, 1890.
- Grippe or dengue, Ely. *Ibid.*
- Gastro-enterostomy, a case of, after Senn's method for cancerous obstructions of the pylorus, Stamm. *Med. News*, Feb. 1, 1890.
- Guarana in chronic diarrhoea, Boughter. *Amer. Jour. Pharmacy*, Feb., 1890.
- Grouse-disease, ein fernerer Beitrag zur Kenntniss des Bacillus der, Klein. *Centralblatt für Bakteriologie u. Parasitenkunde*. 10 Jan., 1890.
- Grippe, la, et la dengue, Teissier. *Le Bul. Méd.*, 15 Janv., '90.
- Grippe, influenza, ou dengue. *La Norm. Méd.*, 15 Janv., 1890.
- Hépatite tuberculeuse chez les enfants, étude clinique sur une forme de, Hutinel. *Le Bulletin Médical*, 12 Janvier, 1890.
- Hysteropexia in prolapsus uterini, Assaky. *Clinica*, 15 Jan., '90.
- Hysterorrapie, doué observations de, Kiriak. *Ibid.*
- Influenza della innervazione cardiaca sull' energia e sul trofismo del miocardia, Ferronini. *La Rif. Med.*, 21 Gen., '90.
- Interscapulo-thoracic amputation. *Lewis Annals of Surg.*, Feb., 1890.
- Improved Cæsarean section, the, Haggard. *Atlanta Med. and Surg. Jour.*, Feb., 1890.
- Iritis, Wood. *Ibid.*
- Influenza, des rapports de la, Lacoarret. *Journal de Méd. de Bordeaux*, 2 Fév., 1890.
- Influenza, the present epidemic of, Bryson. *N. Y. Med. Jour.*, Feb. 1, 1890.
- Intussusception in a child of six months, laparotomy, evisceration, recovery, Kammerer. *Med. Record*, Feb. 1, 1890.
- Knee-jerk, the, after section of the spinal cord, Reichert. *Jour. Nerv. and Mental Disease*, Feb., 1890.
- Laparotomy for ectopic pregnancy, Ashly. *Maryland Med. Jour.*, Feb., 1890.
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- Larvæ, of the, lucilia macallaria, deposited in the healthy nasal cavity, Jennings. *Kansas City Med. Index*, Jan., 1890.
- Locomotor ataxia by suspension, the treatment of, Shaw. *Jour. Amer. Med. Ass'n*, Feb. 1, 1890.
- Medicinisches Klinik in Amsterdam, aus der, Pel. *Berliner Klinische Wochenschrift*, Jan., 1890.
- Morphine injections followed by emphysematous gangrene (malignant oedema), Bremer. *Jour. Nervous and Mental Disease*, Feb., 1890.
- Management of typhoid fever, a few points on, Love. *St. Louis Clinique*, Jan., 1890.
- Miescher's corpuscles in actinomycosis, Gibbes. *Annals of Surgery*, Feb., 1890.
- Maternal impressions, Buckel. *Pac. Med. Journal*, Feb., '90.
- Also, by Overend. *Ibid.*
- Means for the more perfect sterilization of surgical instruments and dressings, Delatour. *Brooklyn Med. Journal*, Feb., 1890.
- Osmosis experiments, report on, with living and dead membranes, Reid. *Brit. Med. Jour.*, Jan. 25, 1890.
- Primer Congreso Médico de la Isla de Cuba. *Cronica Médico-Quirúrgica de la Habana*, Jan., 1890.
- Peroxide of hydrogen for the relief of bites from venomous insects, Ricord. *Med. Rec.*, Feb. 8, 1890.
- Pulmonary consumption, early detection of, Canfield. *Maryland Med. Jour.*, Jan. 25, 1890.
- Pulmonary tuberculosis, prognosis in, Chapman. *N. E. Med. Monthly*, Feb., 1890.
- Penetrating wounds of the cornea in which the iris is involved, Sims. *St. Louis Med. and Surg. Jour.*, Feb., 1890.
- Retro-catheterization in urethral stricture, Lewis. *Medical Progress*, Jan., 1890.
- Relation of the thoracic and abdominal walls to the spinal column, Weigel. *Buffalo Med. and Surg. Jour.*, Feb., 1890.
- Resection of the hip joint for tuberculous coxitis, Grant. *Amer. Pract. and News*, Feb. 1, 1890.
- Smoke, fumes and vapors in the treatment of catarrh, Farrar. *Weekly Med. Rev.*, Feb. 1, 1890.
- Syphilis, the treatment of, Blackburn. *Med. Progr.*, Jan., '90.
- Sacro-iliac disease, Burnett. *Am. Pract. and News*, Feb. 1, '90.
- Spastic paraplegia, two cases of, in the same family, Latimer. *Archives of Pediatrics*, Feb., 1890.
- Scarlet Fever, Rotch. *Ibid.*
- Statistique critique des opérations pratiquées pendant l'année 1888-1889, Trélat. *Le Bulletin Médicale*, 29 Jan., 1890.
- Statistischer Beitrag zur Kenntniss der Eiterungserreger bei Menschen und Thieren, Karlinski. *Centralblatt*, 18 Jan., '90.
- Typhloenteritis, the caecum operation, Ela. *Boston Med. and Surg. Jour.*, Feb. 6, 1890.
- Tracheotomy and intubation, Mudd. *Med. Mirror*, Jan., '90.
- Unsuspected lead poisoning in children, Brown. *Brit. Med. Jour.*, Jan. 25, 1890.
- Vertigo of bulbar origin, address on, Buzzard. *The Lancet*, Jan. 25, 1890.